

Georgia State University
ScholarWorks @ Georgia State University

Applied Linguistics and English as a Second
Language Dissertations

Department of Applied Linguistics and English as a
Second Language

Fall 12-14-2017

The Impact of Dialogic CF on L2 Japanese Writers' Linguistic and Affective Outcomes

Mizuki Mazzotta

Follow this and additional works at: http://scholarworks.gsu.edu/alesl_diss

Recommended Citation

Mazzotta, Mizuki, "The Impact of Dialogic CF on L2 Japanese Writers' Linguistic and Affective Outcomes." Dissertation, Georgia State University, 2017.
http://scholarworks.gsu.edu/alesl_diss/43

This Dissertation is brought to you for free and open access by the Department of Applied Linguistics and English as a Second Language at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Applied Linguistics and English as a Second Language Dissertations by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

THE IMPACT OF DIALOGIC CF ON L2 JAPANESE WRITERS' LINGUISTIC AND
AFFECTIVE OUTCOMES

by

MIZUKI MAZZOTTA

Under the Direction of Diane Belcher, PhD

ABSTRACT

The efficacy of corrective feedback (CF) on writing for second language (L2) development has been much studied in applied linguistics since Truscott's (1996) polemic against written CF. However, no clear picture of its effectiveness has emerged yet as empirical studies have reported conflicting findings. The majority of these studies are short-term studies focusing on the role of teacher-centered written CF from the cognitive perspective, and therefore the long-term developmental process, oral CF, and the role of the learner and learner affect in the feedback process have been under-explored. In addition, previous research has focused on English learners, and little is known about the impact of CF in writing on learners of non-European languages. In an attempt to address these research gaps, the present study, using

sociocultural theory as its theoretical framework, investigated the long-term impact of Vygotskian dialogic CF, an operationalization of CF as mediation in the learner's zone of proximal development (Aljaafreh & Lantolf, 1994), on L2 Japanese writers' linguistic and affective outcomes.

To carry out this investigation, a year-long mixed-methods case study was conducted. Participants were two American undergraduate Japanese as a foreign language learners who were asked to produce personal writing and then participate in a face-to-face writing conference to receive dialogic CF from the researcher. Data included the two learners' writing samples, interviews, audio-recordings of the writing conferences, and researcher field notes. Learners' linguistic outcome was analyzed quantitatively using accuracy rates in writing and also qualitatively using genetic method (Vygotsky, 1978) to trace changes in the learner's responsiveness to dialogic CF. Learners' affective outcome was qualitatively analyzed using the interview data.

The findings with respect to linguistic outcomes obtained from longitudinal data revealed the 'wave-like' characteristic of the nature of the L2 developmental process, which questions the common data interpretation equating the lack of short-term accuracy improvement with inefficacy of CF. The findings from the interview analysis showed that positive emotions were frequently engendered and the two learners frequently exercised their agency during dialogic CF writing conferences, which suggests that feedback process in L2 writing is not only a cognitive process but also an affective process.

INDEX WORDS: Affect, Corrective Feedback, Japanese as a Foreign Language, Second Language Acquisition, Second Language Writing, Sociocultural Theory

THE IMPACT OF DIALOGIC CF ON L2 JAPANESE WRITERS' LINGUISTIC AND
AFFECTIVE OUTCOMES

by

MIZUKI MAZZOTTA

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

Doctor of Philosophy

in the College of Arts and Sciences

Georgia State University

2017

Copyright by
Mizuki Mazzotta
2017

THE IMPACT OF DIALOGIC CF ON L2 JAPANESE WRITERS' LINGUISTIC AND
AFFECTIVE OUTCOMES

by

MIZUKI MAZZOTTA

Committee Chair: Diane Belcher

Committee: Gayle Nelson

John Murphy

Paula Garrett-Rucks

Electronic Version Approved:

Office of Graduate Studies

College of Arts and Sciences

Georgia State University

December 2017

DEDICATION

To Stefano, Rosalba and Elio

ACKNOWLEDGEMENTS

My deepest gratitude goes to my advisor, Dr. Diane Belcher. Countless hours of discussion with Dr. Belcher stimulated my intellect. With her constant attention and immediate responsiveness, Dr. Belcher supported me affectively as well. Her feedback has always encouraged me, gave me confidence as a writer, and fueled my motivation to write. I consider it great fortune to have had Dr. Belcher as my advisor.

I would also like to recognize my dissertation committee, Dr. Gayle Nelson, Dr. John Murphy, and Dr. Paula Garrett-Rucks for their advice and warm support. In addition, there are colleagues to whom I owe debt of gratitude: Dr. Yuki Takatori, Dave Chiesa, and Hae Sung Young.

Lastly, a very special thank you must go to my husband, Stefano, and my children, Rosalba and Elio. Their understanding and support enabled me to earn a PhD while working full-time and raising young children.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	V
LIST OF TABLES	X
LIST OF FIGURES	XI
1 INTRODUCTION	1
1.1 Background of the study	1
1.2 Statement of purpose	5
1.3 Overview of the study	6
<i>1.3.1 Research questions.....</i>	<i>7</i>
<i>1.3.2 Writing conference procedures</i>	<i>7</i>
<i>1.3.3 Target structures: Case particles, prenominal modification with no, and copula overuse in adjectival predicates.....</i>	<i>8</i>
1.4 Organization of the dissertation	8
2 LITERATURE REVIEW	10
2.1 A brief history of the error correction debate	10
<i>2.1.1 Evidence of CF effectiveness.....</i>	<i>11</i>
<i>2.1.2 Operationalization of CF</i>	<i>16</i>
<i>2.1.3 Learner affect and CF in L2 writing.....</i>	<i>23</i>
2.2 Sociocultural approach to second language learning and CF in writing.....	30
<i>2.2.1 Core constructs in sociocultural theory</i>	<i>34</i>

2.3	Sociocultural research on CF in L2 writing.....	41
2.4	Conclusion.....	49
3	METHODOLOGY	52
3.1	Rationale for a case study approach.....	52
3.2	Research context.....	54
3.3	Participants	55
3.4	Researcher role	59
3.5	Data collection	61
3.5.1	<i>Interviews</i>	62
3.5.2	<i>Writing conferences</i>	65
3.5.3	<i>Data sources</i>	72
3.6	Data analysis	72
3.6.1	<i>Evidence in writing</i>	73
3.6.2	<i>Evidence in interaction</i>	75
3.6.3	<i>Content analysis of interview evidence</i>	77
3.7	Conclusion.....	80
4	FINDINGS AND DISCUSSION: LINGUISTIC OUTCOMES.....	82
4.1	Evidence of learning in writing.....	82
4.1.1	<i>Overall accuracy rate</i>	83
4.1.2	<i>Case particle errors</i>	85

4.1.3	<i>Prenominal modification with –no errors</i>	86
4.1.4	<i>Copula overuse in adjectival predicates</i>	88
4.2	Evidence of learning in interactions: Genetic method results	89
4.2.1	<i>Macrogenetic analysis (across writing conferences)</i>	93
4.2.2	<i>Microgenetic analysis (within a writing conference)</i>	94
4.3	Summary	95
5	FINDINGS AND DISCUSSION: AFFECTIVE OUTCOMES	97
5.1	JFL learners’ affective response to dialogic CF	98
5.1.1	<i>Purpose and views on L2 writing</i>	98
5.1.2	<i>Learner affect and CF process</i>	110
5.1.3	<i>Learner agency in the CF process</i>	127
5.1.4	<i>Conclusion: Research question 2</i>	133
5.2	JFL learners’ perception of language learning through dialogic CF	134
5.2.1	<i>Teacher’s acknowledgement as a source of self-perceived language learning (Tina and Felix)</i>	134
5.2.2	<i>Self-realization of increased competence (Felix)</i>	138
5.2.3	<i>Conclusion: Research question 3</i>	139
6	CONCLUSION	141
6.1	Review of Findings and Significance of the Study	142
6.1.1	<i>Linguistic Outcomes</i>	142

6.1.2 <i>Affective Outcomes</i>	144
6.2 Pedagogical Implications	145
6.3 Limitations of the Present Study and Directions for Future Research	148
6.4 Concluding Remarks	149
REFERENCES.....	151
APPENDICES	168
Appendix A	168
Appendix B	170
Appendix C	171
Appendix D	172
Appendix E	174
Appendix F.....	176

LIST OF TABLES

Table 2.1 Regulatory Scale of Implicit to Explicit Help	44
Table 3.1 Background Information on Participants	57
Table 3.2 Overview of Data Collection Procedure	62
Table 3.3 Writing Topics and Time Line for Tina.....	66
Table 3.4 Writing Topics and Time Line for Felix.....	67
Table 3.5 Writing Task and Feedback Design Features	71
Table 3.6 Summary of Data Types for Each Research Question	73
Table 4.1 Accuracy Rate and Genetic Method Results for Tina	90
Table 4.2 Accuracy Rate and Genetic Method Results for Felix	92

LIST OF FIGURES

Figure 4.1 Accuracy rates (proportion of correct instances over total instances) for all target structures combined for Tina and Felix	84
Figure 4.2 Accuracy rates (proportion of correct instances over total instances) for the Case particles (wa, ga, o, ni).....	86
Figure 4.3 Accuracy rates (proportion of correct instances over total instances) for prenominal modification for Tina	87
Figure 4.4 Accuracy rates (proportion of correct instances over total instances) for prenominal modification for Felix	87
Figure 4.5 Accuracy rates (proportion of correct instances over total instances) for adjectival predicate for Tina.....	88
Figure 4.6 Accuracy rates (proportion of correct instances over total instances) for adjectival predicate for Felix	89
Figure 5.1 Lantern parade (Felix’s writing #2).....	108

1 INTRODUCTION

1.1 Background of the study

Providing effective feedback on their students' writing is a central concern of second language (L2) writing teachers (Hyland, 1998, p. 255). Many L2 teachers feel it is their responsibility to provide corrective feedback (CF) or grammar error correction on their students' writing (Bitchener, 2012, p. 855) as their primary concern is to promote students' L2 development, though not every L2 teacher holds this view (e.g., Truscott, 1996). In some contexts (e.g., EFL context in Hong Kong), teachers' feedback on students' writing has been reported to be predominantly on the errors (Lee, 2008). Although the importance of linguistic accuracy has been seriously questioned since the 1970s by L2 teachers who claim that linguistic errors that do not impede the communication of ideas do not need to be attended to (e.g., Halstead, 1975; Omaggio Hadley, 2001), linguistic accuracy in writing nevertheless continues to be important in real life. For example, in the study exploring the image associated with inaccurate writing, Beason (2001) found that grammatical and mechanical errors in business writing are associated with negative reactions and readers "use errors to construct a negative image of a writer or organization" (p. 58) regardless of whether the error in question impedes meaning. Based on his findings, Beason suggests "We should not imply that errors that seem minor to some people (e.g., to the writer or the teacher) are not worth much attention" (p. 58). Furthermore, errors that L2 writers make can be stigmatizing to the writer since a reader might form a negative impression of the writer's ability from "an error that identifies the writer as coming from an L2 background" (Bitchener & Ferris; 2012, p. 115). Thus, L2 writing scholars who focus on the learner's needs in real life argue that it is L2 teachers' responsibility to prepare their students to write successfully in the real world in which linguistically accurate writing is

demanded (e.g., Evans, et al., 2011; Ferris, 2002, 2006; Horowitz, 1986).

L2 teachers have long been providing CF in their students' writing with an assumption or hope that their written CF would facilitate L2 learning and that accuracy in the students' writing would improve over time. It has been reported that students also say that they believe CF in their writing helps them learn L2 (e.g., Cohen & Cavalcanti, 1990). When Truscott (1996) challenged this common belief by condemning grammar error correction in L2 writing class, the debate over the effectiveness of CF, which is often referred to as 'the error correction debate'¹, started in the field. Truscott's (1996) controversial essay elicited many responses, and the effectiveness of CF in writing has become one of the most researched topics in the field of L2 writing (Hartshorn & Evans, 2015). One of the reasons this topic continues to attract much attention from L2 writing scholars is that existing research reports conflicting results as to whether CF in writing is effective in promoting L2 learning. In order to answer the primary question of whether CF facilitates L2 learning and thus promotes linguistic accuracy in writing, the effectiveness of CF has been investigated with more detailed questions asking: (1) what constitutes evidence of L2 learning (short- or long-term improvement, improvement on revision or on a new piece of writing); (2) how should evidence be measured (reduction of global error rate or reduction of specific errors); and (3) what strategy of CF is effective (e.g., implicit CF, explicit CF, metalinguistic explanation, focused CF, unfocused CF, dialogic CF, CF followed by required revision). Growing interest in research at the interface between L2 writing and Second Language Acquisition (SLA), as noted by Ortega (2012), generated numerous studies of CF in L2 writing

¹ Another challenge is now coming from ELF, as in the work of Jennifer Jenkins (e.g., Jenkins, 2014), who argues that since most speakers of English today are not native speakers (NSs), NS notions of accuracy are far less relevant. However, I will not concern this issue in this present study because most Japanese speakers are probably NSs of Japanese, with NS expectations.

that are informed by the cognitive SLA approach. These studies focused on learners' acquisition of linguistic features and the type of input (e.g., implicit CF, explicit CF) that triggers acquisition under the assumption that teacher CF (i.e., input) alone is responsible for its effectiveness or ineffectiveness by seeing the learner as a passive recipient who simply processes the linguistic input. Thus, humanistic issues, for example, learner affect, motivation, and agency have largely been neglected as a factor that potentially influences the effectiveness of CF. Sociocultural theory (SCT), on the other hand, argues that the learner needs to be seen as a whole person in understanding the process of learning (Lantolf & Pavlenko, 2001; Vygotsky, 1978). Moreover, as Lee (2014a) explains, the feedback process is 'a social act' in which the role of the learner is a crucial factor in its efficacy since CF in L2 writing is a pedagogical practice which takes place in the real classroom. Although SCT-informed research has made a substantial contribution in the field of SLA, only few studies of CF in L2 writing framed in SCT have been conducted (e.g., Aljaafreh & Lantolf, 1994; Erlam et al., 2013; Han & Hyland, 2016; Nassaji & Swain, 2000). However, in recognition of CF in L2 writing as a social act, a growing number of L2 writing scholars have called for SCT-informed research on CF in L2 writing (e.g., Hyland, F., 2010; Lee, 2014a, 2014b). For example, Hyland (2010) suggests that SCT-informed CF research which focuses on CF "within the whole context of learning and on the learners' role in interpreting and using feedback" (p. 181) will further our understanding of the effectiveness of CF in L2 writing. Therefore, in order to further our understanding of the role and impact of CF in L2 writing and L2 learning, it is imperative to investigate the feedback process holistically, especially if we posit the language learning potential of writing. Regarding L2 learning research, van Lier (2004) points out that in a complex learning activity such as second language learning, "a multiplicity of social and cognitive factors play an inseparable role" (p. 140), and Larsen-Freeman (2002)

suggests, “we should look for how to connect cognitive acquisition and social use” (p. 41) to account for the complexity of L2 learning.

Another research gap that has important implications for furthering our knowledge about CF in L2 writing is contexts in L2 writing. As observed by Manchón (2009), most L2 writing research has been conducted in ESL contexts and the limited attention to EFL contexts “badly distort[s] our understanding of L2 writing” (p. xiii). Belcher (2012, p. 143) adds to this observation by remarking that FL in languages other than English contexts are even more neglected than EFL contexts. In particular, L2 writing research on CF in the U.S. university Japanese as a foreign language (JFL) context is scarce, yet investigating such context is meaningful in enriching our understanding of L2 writing because of the typological difference of Japanese as well as goals and difficulties that are particular to learners of less commonly taught languages. A reason for the scarcity of L2 writing research in the JFL context in the U.S. is that unlike EFL or ESL contexts, writing, i.e. composing, is largely neglected due to the heavy emphasis on teaching the unique writing system, i.e. orthography (Hatasa, 2011). Writing systems around the world are typically either logographic or phonographic, but the Japanese writing system is a hybrid of both, composed of three scripts of *hiragana* (syllables), *katakana* (syllables), and *kanji* (logograms) (Ferris and Hedgcock, 2014). The focus of writing instruction in the JFL context is often the mastery of 47 *hiragana* characters, 47 *katakana* characters, and some *kanji* from the list of about 2000 *joyo-kanji* ‘commonly used kanji’. The reason for the lack of attention to writing, i.e. composing, is not only because character learning is time consuming, but also the low proficiency level JFL learners typically achieve. Due to the typological differences between Japanese and English, most students in the U.S. universities would not exceed the elementary-intermediate levels (Higgs, 1984). Thus, the inclusion of

writing instruction has been discouraged by some prominent scholars (Jordan & Walton, 1987; Unger et al., 1993) who argue that writing instruction would be cognitively too demanding for typical JFL learners in the U.S. Since writing has received little attention in JFL instruction, it is natural that there is a dearth of research on L2 Japanese writing and that Japanese writing studies is still in its infancy (Hatasa, 2011, p. 114).

This subsection introduced the background of the current study. The remainder of the chapter is organized as follows. Section 1.2, provides statement of purpose. Section 1.3 presents an overview of the study including research context, research questions, writing conference procedures, and target structures. The final section outlines the organization of this dissertation.

1.2 Statement of purpose

This study aimed to explore the interface between second language (L2) writing and Second Language Acquisition (SLA) in an under-researched Japanese as a foreign language (JFL) context in the U.S. with a particular focus on the “language learning potential” (e.g., Manchón and Roca de Larios, 2007) of L2 writing, and the longstanding concern in L2 (written) corrective feedback (CF) studies: How best a teacher can respond to her students’ written texts for the purpose of facilitating their language learning (cf. Bitchener & Ferris, 2012).

The present study differs from the majority of previous L2 (written) CF studies in its attempt: (a) to describe and characterize the nature of the process of L2 learning using longitudinal data; and (b) to holistically examine the effectiveness of CF in L2 writing by taking into consideration learners’ independent performance (i.e., accuracy improvement in new pieces of writings), learners’ assisted performance (i.e., improvement in learners’ responsiveness to dialogic CF), affective outcomes, and social factors associated with CF practice using a mixed methods case study approach. As observed by Cumming (1998), most L2 writing CF research

has been compartmentalized into specific aspects of L2 writing. For example, the majority of research on CF in L2 writing investigated the effectiveness of CF by seeing it as a cognitive process which can only be inferred through linguistic outcomes. Thus, there appears to be a consensus among researchers working in this field that evidence of the effectiveness of CF on accuracy improvement in L2 writing can only be found in new pieces of writing (c.f. Bitchener, 2012). Therefore, researchers have been using an experimental design to see if the provision of certain type of CF in writing would improve linguistic accuracy in new pieces of writing without considering social and affective factors. CF case studies are rare, but there are some case studies (e.g., Hyland, F., 1998) which provided compelling evidence that learner affect plays an important role in the feedback process. Despite such findings, learner affect has received little attention in the field perhaps because CF case studies usually report only learners' affective response to CF in L2 writing without investigating linguistic outcomes (i.e., whether accuracy improved in new pieces of writing), which appears to be the main focus of current CF studies in L2 writing. Therefore, the main value of this study lies in its attempt to connect cognitive and social/affective factors associated with feedback in L2 writing from the perspective of SCT, which posits the dialectic relationship between intellect/cognition and affect/emotion in learning. This study draws on CF in L2 writing studies framed in SCT, especially Aljaafreh and Lantolf (1994), in order to investigate the impact of feedback process on L2 learning as both cognitive and social/affective process.

1.3 Overview of the study

This study is a case analysis of writing conferences that were designed and conducted for research purposes. Two English-speaking participants were recruited from a university Japanese program. These two JFL learners took part in one-on-one writing conferences in which they self-

corrected errors in their writing with the assistance of the researcher. The researcher provided assistance for the learner self-correction through dialogic interactions which were carried out according to principles of SCT using Aljaafreh and Lantolf's (1994) regulatory scale to guide the interactions. In this dissertation, I refer to such oral CF as *dialogic CF*. Although the technique used in the present study is an application of Dynamic Assessment (DA) techniques, I am using the term *dialogic CF* as the focus of the present study is not assessment but CF.

1.3.1 Research questions

This study explored how learners respond to dialogic CF on their L2 writing with the sociocultural understanding that cognition and affect are dialectically united, and therefore holistically analyzed the impact dialogic CF makes on L2 learning in general and L2 Japanese writing in particular. The guiding research questions are as follows:

1. How do elementary and intermediate level English-speaking learners of Japanese as a foreign language (JFL) respond to dialogic CF with respect to use of Japanese grammatical structures?
2. How do elementary and intermediate level English-speaking JFL learners respond to dialogic CF with respect to inter- and intrapersonal issues such as affect-emotion and learner agency?
3. How do elementary and intermediate level English-speaking JFL learners perceive their own language learning through dialogic CF in their writing?

1.3.2 Writing conference procedures

Each of the JFL learners participated in 15 writing conferences in two data collection phases that spanned over 12 months. During each phase, the JFL learners met with the researcher

every one or two weeks. The task was to produce a personal writing that is at least one paragraph long alone, and to self-correct linguistic errors on the writing with the assistance of the researcher during a writing conference. Detailed description of the conference procedure is provided in the methods chapter.

1.3.3 Target structures: Case particles, prenominal modification with *no*, and copula overuse in adjectival predicates

Due to the paucity of written CF studies investigating L2 Japanese, little is known as to what grammatical structures English-speaking learners of Japanese have difficulty controlling in writing. Thus, the target structures for analysis were chosen after the data collection was completed. In order to identify the most frequent errors, I first tallied all grammatical errors from every writing in an error log for each learner separately. I then placed the errors in categories (e.g., Case particles). Using these error logs, I chose three most frequent error categories as the target structures for analysis. These categories are (1) Case particles, (2) prenominal modification with *no*, and (3) copula overuse in adjectival predicates. A review of literature reveals that the first two categories are challenging for L2 learners to master (Iwasaki, 2006).

1.4 Organization of the dissertation

This dissertation is organized into six chapters. Chapter 1 presents the background and an overview of the current study. Chapter 2 includes a review of the relevant literature on the error correction debate, the efficacy of CF in L2 writing, and sociocultural approach to L2 learning and CF in L2 writing. Chapter 3 describes the research methodology employed in the current study including the rationale for my methodological choice, a description of the context, participants, my role as a researcher and data collection procedure, and data analysis. Chapter 4 presents findings and discussion regarding the linguistic outcomes of the dialogic CF. Chapter 5

continues findings and discussion regarding affective outcomes of dialogic CF and learner perception of language learning through the feedback process. Finally, chapter 6 concludes the dissertation by summarizing the main findings, offering research and pedagogical implications, addressing limitations, and providing directions for future research.

2 LITERATURE REVIEW

This chapter reviews relevant literature in framing the current study. The chapter begins with outlining a brief history of the error correction debate while at the same time identifying research gaps as well as highlighting the relevance of SCT perspectives in advancing our knowledge in the CF in L2 writing research. Then, in section 2.2, I review literature on the sociocultural approach to second language learning to define some key constructs of SCT. I then proceed to review SCT-informed research on CF in L2 Writing in section 2.3. Lastly, section 2.4 concludes this chapter.

2.1 A brief history of the error correction debate

This section provides an overview of the error correction debate focusing on how evidence of the efficacy of CF has been conceptualized and how CF has been operationalized. I then elaborate on the importance of learner affect in understanding the efficacy of CF by drawing on qualitative studies that explored learners' emotional response to CF and the sociocultural perspective on L2 learning.

The heated debate over the question of whether error correction is helpful for L2 writers dates back to Truscott's (1996) essay published in *Language Learning* in which he argued that "grammar correction has no place in writing courses and should be abandoned" (p.328). Truscott defined the term *grammar correction* as "correction of grammatical errors for the purpose of improving a student's ability to write accurately" (p. 329). In this paper, I refer to *grammar correction* as *corrective feedback (CF)* following the convention of the recent literature. Truscott's (1996) polemic against CF was based on: (1) research evidence supporting inefficiency of CF; (2) theoretical claims of the nature of language learning; and (3) practical and affective problems. As Truscott made strong claims in his essay, it subsequently elicited strong

reactions from L2 writing scholars. It may not be an overstatement to say that Truscott (1996) made a substantial contribution to move the field forward. Since 1996, an extensive number of empirical studies investigating the effectiveness of CF have been carried out and they reported conflicting results. Though the effectiveness of CF in L2 writing is still a controversial topic, the field has advanced in a sense that we now understand the complexity associated with CF. The core question surrounding CF debate has developed from asking whether CF is effective to asking what type of CF is effective under what conditions. In what follows, I review relevant studies to outline how evidence of language learning through CF has been understood, how empirical studies have operationalized CF in L2 writing, and how the role of affect in the feedback practice has been viewed in the field.

2.1.1 Evidence of CF effectiveness

Evidence of the effectiveness of CF in L2 writing in terms of language learning has been conceptualized differently in different studies. The topics discussed among L2 writing scholars include: (a) whether one should look for evidence of CF efficacy in the revision, the new piece of writing or in interaction; (b) whether short-term data is sufficient in determining the efficacy of CF; and (c) how to measure the effectiveness of CF.

2.1.1.1 Evidence in writing and in interaction

Many of early CF studies (e.g. Ashwell, 2000; Fathman & Whalley, 1990; Ferris, 1997) argued that written CF was effective based on the accuracy improvement on the revision of a text. Truscott (1996) criticized that the accuracy improvement on the revision does not constitute evidence of learning because what it shows is that the learner can edit their writing by using error corrections from the teacher. Truscott's claim was supported by Truscott and Hsu's (2008) experimental study. It showed that the experimental group who received CF on their first

composition made greater accuracy improvement on the revision in comparison to the control group who did not receive CF. However, the experimental group's accuracy rate on the second composition (a new piece of writing) did not show any improvement compared to the first composition. Thus, the authors concluded that accuracy gain on the revision is not evidence of language learning and confirmed the claim made by Truscott (1996). It is now generally considered that only improvements found in a new piece of writing should be considered as evidence of language learning (Bitchener 2012).

While the majority of CF studies in L2 writing consider the learner's independent performance on a new piece of writing as evidence of the effectiveness of CF, SCT-informed studies argue that evidence on the effectiveness of CF can also be found in interaction. Aljaafreh and Lantolf (1994) is the first study that investigated the effectiveness of CF from a sociocultural perspective and argued for the effectiveness of CF on the basis of the learners' assisted performance using Vygotsky's (1978) genetic method. The advantage of the genetic method is that it allows one to capture a small amount of development which cannot be revealed from the analysis of independent performance alone, and therefore it can potentially shed light on the development of linguistic features which appear to be non-responsive to CF based on the learner's independent performance on new pieces of writing. A detailed review of Aljaafreh and Lantolf (1994) is provided in section 2.2 below.

2.1.1.2 Short-term and long-term effect of CF

Among the studies that investigated the effectiveness of CF using the accuracy improvement on a new piece of writing as evidence, some explored its effectiveness with one treatment of CF while others did so with multiple CF treatments in a longitudinal study. Truscott and Hsu (2008), which was briefly discussed above, is an example of a single CF treatment

study. The authors conducted a three week controlled study with an experimental group and a control group. The experimental group received implicit written CF (grammatical errors were underlined) on one writing, revised it, and then wrote a new piece of writing on Week 3. The control group also produced three writings, but without receiving written CF. The authors compared the error rate (error per word) of first and third compositions and found that the error rate for both groups were higher on the third composition and there was no statistically significant difference between the two groups. Based on these findings, the authors argued that short-term (or a single treatment of) CF is ineffective. However, what we do not learn from this study is whether implicit CF is ineffective or every type of CF is ineffective when only one treatment is provided. Van Beuningen, De Jong, and Kuiken (2012) addressed this limitation by conducting a similar experiment but including an additional experimental group. Each group received implicit CF, explicit CF, or no CF respectively. The results, based on the comparison of the error rate of the first and third composition, showed that only the explicit CF group improved their accuracy rate on the third composition. Based on the results of these two studies, it appears that a single CF treatment can promote linguistic accuracy on a new piece of writing under the condition that the CF is explicit. However, we need to be cautious in interpreting the results from single CF treatment.

Inadequacy of the short-term study in understanding the efficacy of CF in L2 writing was shown by the Bitchener, Young, and Cameron (2005) study which demonstrated the progression of accuracy rate change over 12 weeks. Unlike other studies that compared the accuracy rate of only two compositions (the first composition and the last composition), the authors documented the accuracy rate for each error type from every composition ($N = 4$). The results showed that the accuracy improvement over four different compositions was not upwardly linear; some of the

results displayed U-shaped progression pattern such that the accuracy rate decreased first and then it significantly increased at the end of the 12 week study. From a perspective that L2 development is upwardly linear, one might expect some improvement after each CF treatment is given, and short-term study with one CF treatment would provide sufficient evidence to argue for or against the efficacy of CF. However, the results of Bitchener et al. (2005), as discussed by the authors, lend support to the findings of previous SLA studies which have shown that L2 learners' accuracy improvement is not upwardly linear (e.g., Ellis, 1994; Pienemann, 1989). It is also consistent with the claims of sociocultural theory (e.g., Lantolf, 2006; Vygotsky, 1978) and Larsen-Freeman's chaos/complexity perspective on SLA (e.g., Larsen-Freeman, 1997, 2002) that cognitive development, including L2 development, is non-linear and emergent. The results of Bitchener et al. (2005) compellingly suggest the inadequacy of short-term study for the investigation of the efficacy of CF by showing that temporary decrease of accuracy in a new piece of writing does not necessarily constitute evidence of inefficiency of CF or absence of language development. Thus, long-term studies documenting accuracy improvement of multiple writings are necessary to fully understand the efficacy of CF in L2 writing.

2.1.1.3 Error rate and error types

In order to demonstrate accuracy improvement or the lack thereof, the majority of CF in L2 writing studies have reported error rate. While some studies (e.g., Truscott & Hsu, 2008; Van Beuningen et al., 2012) reported global error rate by calculating an average of error per word considering all grammatical errors in the text, other studies calculated error rate of each error type separately. Averaging the accuracy rate of all errors may be a good measure of the effectiveness of CF if the responsiveness of all types of errors are equal. However, Ferris (1999) proposed that some error categories are treatable by written CF while others appear to be

untreatable. Ferris (2006) addressed this issue in her semester long study in which ESL learners received written CF on their compositions. Ferris compared the global error rate of essay 1 (written at the beginning of the semester) and essay 4 (written at the end of the semester), and found a significant error rate reduction. Furthermore, the author calculated error rate of each type of errors (verb, noun, article, lexical, sentence errors) separately, and found that the normalized error rate reduction was caused by the verb errors alone; error rates of other types of errors did not decrease. Since a control group was not included in this study, it is not clear whether the accuracy improvement was caused solely by CF. However, this study made a valuable contribution to the field by suggesting that normalized global error rate is not an accurate measure of the effectiveness of CF since certain types of errors (e.g., verb form errors) are more responsive to CF than others (e.g., article errors). Bitchener et al. (2005) confirmed Ferris's (1999, 2006) claim that not all error types are equally responsive to CF with their rigorous experimental study. They found no difference between the experimental groups which received CF and the control group which did not receive CF based on the combined error rate of three error categories. However, when they calculated the error rate for each category (prepositions, the definite article, the past simple tense) separately, they found that the accuracy gain of one of the experimental groups was significantly higher than the control group for the definite article and the past simple tense. While Bitchener et al. (2005) confirmed Ferris's claim that some errors are more treatable than others, Bitchener et al. reported conflicting results as well. Ferris (2006) found that article errors are nonresponsive to CF, but Bitchener et al. (2005) showed that the definite article errors responded to CF. Shintani et al. (2014) looked at the indefinite article and found that error rate was not reduced after the provision of CF treatments while the error rate of the hypothetical conditional was reduced. Their participants were university level Japanese

EFL students. Perhaps, the key factor to make a more definitive claim is attention to the individual differences, in this case, the learner's L1. It is not surprising that the Japanese EFL students' accurate use of the English definite article did not improve since it is one of the most difficult features to learn for Japanese learners since their L1 lacks an equivalent grammatical structure. ESL students, on the other hand, consist of students of different L1 backgrounds, and therefore their performance as a group would obscure each learner's accuracy improvement or the lack thereof. Thus, further research that focuses on individual learners, rather than learners as a group, is needed. Moreover, the error types that previous studies looked at are quite limited (e.g., articles, verb forms). Still more neglected has been linguistic errors in languages other than English, especially non-European languages. As observed by Belcher (2012), the field of L2 writing has been predominantly concerned with L2 writers of English, and little attention has been paid to L2 writers of foreign language (FL) context, especially those who study languages other than English. There seems to be an assumption in the field that from research on CF for learners of English, one can arrive at an understanding of CF efficacy in general. However, as noted by Belcher (2012), learners in a FL context typically face challenges distinct from ESL learners (e.g., lack of need to communicate in the target language in a real-world context), and thus we have to be cautious in generalizing results from ESL learners to L2 learners in general. In addition, if we assume writing as "a window on learners' acquisition process" (Belcher, 2012, p. 143), we need to examine a wide variety of linguistic structures of various languages to make a strong claim regarding the efficacy of CF in L2 writing for facilitating L2 learning.

2.1.2 Operationalization of CF

Previous studies have been operationalizing CF in L2 writing various ways in an attempt to identify factors that facilitate language learning through the feedback process.

2.1.2.1 Requiring revision

Although accuracy improvement in the revised text may not necessarily be evidence of learning, requiring revision appears to be a variable that influences the efficacy of CF. Chandler (2003) conducted a semester-long controlled study with ESL learners in which both experimental and control group received written CF on their compositions, but only the experimental group was required to revise their composition. The results showed that only the experimental group improved accuracy in their subsequent writing. This study suggests that requiring revision may determine or enhance the efficacy of CF. Bruton (2009) explains that requiring revision contributes to learning because by requiring students to revise their writing, one can ensure that “the errors have been attended to” (Bruton, 2009, p. 136). Shintani et al. (2014) also found that requiring revision made CF more effective than CF alone. Thus, there seems to be a consensus that requiring revision is a strategy which increases the potential of CF in facilitating language learning.

2.1.2.2 Explicitness of CF and individual differences

The dichotomy between explicit knowledge and implicit knowledge is pervasive in SLA literature. For example, Krashen (1982) theorized that explicit knowledge can help L2 learners to learn about the language, but it is only implicit knowledge that can help the learner acquire the language. In fact, Truscott’s (1996) argument against CF was partly grounded on this theory. However, others theorize that explicit knowledge facilitates language acquisition (e.g., Ellis, 1994), and there is yet no consensus on the role these two types of knowledge play in L2 acquisition and whether explicit knowledge can turn into implicit knowledge through practice. Consequently, L2 writing scholars have been concerned with this dichotomy and CF has been operationalized either as explicit CF in which the teacher provides the correct grammatical form,

or implicit CF in which the teacher indicates the existence of error but without providing the correct form, for example, by underlining the error. This issue became one of the central concerns in CF in L2 writing literature. Comparing direct and indirect types of CF, Lalande (1982) reported that indirect CF was more effective than direct CF, though the difference was not statistically significant. No difference between the two types of CF was found by Semke (1984) and Robb et al. (1986). Bitchener and Knoch (2010), and Van Beuningen et al. (2008, 2012), on the contrary, showed that direct CF was more effective than indirect CF in long-term. Some studies combined explicit CF and metalinguistic explanation. Bitchener and Knoch (2009) reported that the groups which received explicit CF and metalinguistic explanation outperformed the group who only received explicit CF. In this study, metalinguistic explanation appears to have facilitated accuracy gain. However, Shintani et al. (2014) showed that the group which received direct CF outperformed the group which received metalinguistic explanation. The conflicting findings seem puzzling from a perspective that one type of CF is better than the other for everyone.

Vygotsky's SCT, which rejects Cartesian dichotomy prevalent in SLA (Lantolf, 2006), sheds some light on this issue. Based on its dialectical approach, SCT conceptualizes the effective operationalization of CF as the one that is appropriate to the learner's developmental level and thus views the explicit-implicit dichotomy to be irrelevant (Aljaafreh & Lantolf, 1994). Therefore, from sociocultural perspective, explicit CF, implicit CF, and metalinguistic explanation can be effective or ineffective depending on individual differences in terms of developmental level, which explains the conflicting results reported above. Similarly, Bitchener and Ferris (2012, p. 65) underscore the importance of individual differences and argue that whether one type of CF is more effective than others depends on the learner's proficiency level

and thus there is no “one-size-fits-all” (p. 95) CF strategy. Additional problem of the neglect of individual differences was pointed out by Aljaafreh and Lantolf (1994, p. 466) who argued that what we learn from controlled experimental studies is the effect of CF on aggregate learners, which does not tell us much about how CF facilitates or fails to facilitate individual learners’ L2 development. Taken together, previous research suggests that in order to elucidate what operationalization of CF would most effectively facilitate L2 learning, more CF studies grounded in sociocultural theory and focused on individual differences are needed.

2.1.2.3 Focused CF and unfocused CF

While a large number of studies investigated the effect of focused CF which targets just a few linguistic features, little attention has been paid to the effect of unfocused CF which addresses all errors in a text. Ellis et al. (2008) compared the effectiveness of focused CF (the English article system) and unfocused CF. They reported that there was no difference between the two experimental groups, and both groups outperformed the control group. However, as the authors pointed out, the majority of the errors in the unfocused CF groups were article errors anyway and thus there was not much of a difference between the treatments the two groups received. Sheen et al. (2009) also compared the effect of focused CF (the English article system) and unfocused CF. The authors reported that focused CF group outperformed unfocused group. However, this study also did not provide a definitive result as the feedback given to the unfocused group was unsystematic, which could have confused the learners. As Van Beuningen (2010) points out, the future research needs to pay more attention to unfocused CF because it is the most widely used type of CF in the language classroom. In addition, focused CF, as informative as it may be, treats the writing like a grammar exercise.

2.1.2.4 Oral CF in writing conferences

Most CF research on L2 writing has been concerned with written CF, and studies which operationalized the provision of CF on L2 writing orally in a writing conference setting are scarce even though writing conference has become a popular teaching tool. The essential feature of the writing conference is that it involves “only two parties, a teacher and a student, not a teacher and a class” (Carnicelli, 1980, p. 101). Because of this feature, the conferencing event can potentially offer (1) an opportunity for interaction, negotiation, and clarification (Conrad & Goldstein, 1999), and (2) a more personal and effective means of communication than typical written CF in which the teacher provides one-directional corrections (Carnicelli, 1980). As the literature on oral CF in L2 writing is quite limited, I discuss one oral CF study that explored L1 writers’ perception as well as a few studies with L2 writers.

Carnicelli (1980) examined how writing conferences were perceived by students of Freshman English writing course ($N = 1,800$). His qualitative analysis of student comments on the course evaluation revealed that every student perceived that individualized instruction obtained through writing conferences was more effective than group instruction in class or written CF. Students in this study preferred writing conferences over class instructions for two reasons. One is its psychological value for providing privacy, which was important for many of them who felt insecure about their writing. The other was its effectiveness in communication: (1) students were able to receive teacher feedback which was tailored to their needs; (2) students were able to listen to an explanation of teacher's feedback; and (3) students' self-sufficiency and self-learning were promoted by the teacher, who guided them to criticize their own paper before the teacher did so. Participants of this study also commented on the value of writing conferences by comparing it with written CF. What students of this study liked about writing conferences in

comparison to a teacher's one-way communication through written CF is associated with students' emotional response to teacher feedback. They reported that a teacher's one-way communication in the form of written comment could feel destructive. One student commented on the strengths of conferencing in comparison to the limitations of written feedback as follows. "The criticism has been constructive. It helped a great deal when I could see what he meant by going to conferences. If I had just read the comments without explanation, I might have felt the criticism was destructive" (p. 108). Although these comments came from L1 writers, the findings of this study are informative for research on CF in L2 writing as the comments show that student writers respond to teacher CF emotionally, which could apply to L2 writers as well. While the majority of comments were positive evaluations of writing conferences, several students reported the need for the comment to be written down as they could not remember the content of the revision talk during the conference, and they did not have time to take notes either. Perhaps more L2 writers feel the need to have the content of the writing conferences to be written down or to be given sufficient time to take notes because L2 writers may find it more difficult to remember the content of the oral feedback from the teacher. This study does not provide evidence of the effectiveness of writing conferences, but it is nonetheless valuable for suggesting the potential value of writing conference through learners' narratives and identifying factors that might be associated with effective operationalization of CF in L2 writing.

Young and Miller (2004) investigated the impact of writing conference on L2 learning from the perspectives of social approach. Using the theoretical framework of sociocultural theory, Young and Miller conceptualized revision talk during writing conference as a kind of discursive practice which they defined as "recurring episodes of face-to-face interaction, episodes that have social and cultural significance for a community of speakers" (p. 519). The

authors argued that writing conferences were facilitative in promoting language learning of an intermediate Vietnamese ESL learner based on the evidence that the learner's participation in the revision talk became fuller as he attended more conferences. However, whether the Vietnamese learner's accuracy improved as a result of his fuller participation was not reported, and therefore it is unclear whether the learner became a better writer in terms of linguistic accuracy. This limitation was addressed by Bitchener, Young, and Cameron (2005), who tested the effectiveness of a writing conference with a controlled experimental design. The results showed that the group who received written CF followed by a five-minute conference made significantly greater accuracy gain than the group which received written CF only.

As these studies all suggest potential value of oral CF, this under-researched operationalization of CF deserves more attention. Moreover, oral CF is potentially superior to written CF from a sociocultural perspective because one can provide feedback sensitive to the learner's ZPD only through dialogic interactions which can take place in writing conferences whether face-to-face or virtual, but not through teacher-centered written CF.

2.1.2.5 The language choice between L1 and L2

To the best of my knowledge, none of the CF studies considered the use of the learner's L1 in the provision of CF in L2 writing. While the mainstream view among L2 educators may be to avoid the use of L1 in L2 classroom, researchers who embrace a social approach to learning recognize L1 as an effective psychological tool that mediates L2 learning (e.g., Anton & Di Camilla, 1998; Lantolf, 2000; Wells, 1998). For example, Mori (2004) analyzed English-speaking L2 Japanese learners' peer interaction during a task, and reported that they had more language learning opportunities through peer interactions when they were speaking in their L1 comparing to when they were speaking in their L2 Japanese, due to their low proficiency in

Japanese. Similarly, Kim (2015), who qualitatively analyzed newly arrived pre-matriculated ESL students' interactions with a tutor in a writing center, reported that ESL students did not benefit from writing center tutor-tutee interactions due to their low English proficiency, and suggested that if the tutor used the tutee's L1, it would have been much more efficient. In addition, Han and Hyland's (2016) case study on writing conferences in China suggests the usefulness of L1 during conferences. Based on their qualitative analysis of feedback episodes, the authors remarked that a participant, despite her higher proficiency in English, was "cognitively overloaded" (p. 451) and thus was not able to participate actively in the negotiation. Furthermore, the authors commented that the fact that some English teachers in Chinese universities do not speak Chinese is a contextual constraint since many students probably lack the confidence to carry out discussion on their writing in English with a teacher. Taken together, these studies suggest that the value of CF provided in the learner's L1 should be explored further as it could have a great implication for the practice of CF in a foreign language context where the learner's proficiency level is too low to talk about their L2 grammar effectively.

2.1.3 Learner affect and CF in L2 writing

2.1.3.1 Definitions of affect

Affect, as a central component of individual differences, has become one of the key theoretical constructs in SLA (Ellis, 1994). Among the researchers who posit a central role of affect in language learning, Dewaele (2012) claims, "Affect is at the heart of the foreign language (FL) learning and teaching process" (p. 1). However, the role of affect in FL learning is still an under-researched area, as remarked by Garrett and Young (2009), since the focus of FL learning research is predominantly on "the development of knowledge and use of the new language" (p. 209). The role of affect is even more neglected in the discussions of the efficacy of

CF in L2 writing, where the primary focus has been on the strategies of teacher CF (e.g., explicit CF, implicit CF) in relation to accuracy change in new pieces of writing.

The term *affect* covers a wide range of variables that relate to “our emotional being” (Arnold & Brown, 1999, p. 1). These variables include, for example, emotion, motivation (e.g., Dörnyei, 2005; Gardner, 2001; Gardner & Lambert, 1972; Horwitz, 2001), personality characteristics (e.g., Dewaele & Furnham, 1999), and “attitude which condition behavior” (Arnold & Brown, 1999, p. 1). In addition, agency is a particularly important affective factor in understanding L2 learning from sociocultural perspectives (e.g., Duff, 2012; Lantolf & Pavlenko, 2001; Swain, 2006; van Lier, 2008), which will be discussed in section 2.2 below.

Affectivity in L2 learning has been studied from two perspectives. In the field of SLA, affect has traditionally been understood as a source of individual differences (Ellis, 1994) which exists within a learner as a static attribute. Affective factors investigated from this perspective include anxiety (e.g., Heron, 1989), inhibition (e.g., Dufeu, 1994), self-esteem (e.g., Canfield & Wells, 1994), motivation (e.g., Gardner & Lambert, 1972) and learner styles (e.g., Ehrman, 1996) among others. More recently, from the poststructuralist perspective, scholars have focused on the dynamic and relational aspects of affect which develop in a socio-cultural situation between the participants (Arnold, 2011, p. 11). Researchers who take a social approach argue that “Emotions are not just an individual’s private inner workings in response to external stimuli but are socially constructed acts of communication that can mediate one’s thinking, behavior, and goals” (Imai, 2010, p. 279). Motivation, one of the emotional matters that has been considered to be of crucial importance to SLA (Arnold & Brown, 1999; Gardner & Lambert, 1972), has also been reconceptualized as being socially constructed (Ushioda & Dörnyei, 2009). Furthermore, Dörnyei (2005) retheorized L2 learning motivation in relation to language identity

and self-concept. Unlike the traditional theorization of motivation in terms of integrative concept (Gardner & Lambert, 1972), Dörnyei (2005) theorized motivation in relation to the poststructuralist notions of self and identity, and defined motivation as “the desire to reduce the discrepancy between one’s actual and ideal or ought selves” (p. 101) in which “ideal or ought selves” refer to the representation of the attributes that an L2 learner wishes to possess.

The significance of affect for cognitive development such as L2 learning comes from the field of psychology (e.g., Stevick, 1996) and neurobiology (e.g., Schumann, 1997), which have demonstrated a close link between cognition and emotion. Similarly, sociocultural theory posits the dialectic unity of emotion and cognition (e.g., van Lier 2004). The empirical evidence from the fields of psychology and neurobiology as well as the theoretical assumption of SCT warrant further investigation of L2 learners’ emotional response to CF in their writing in order to further our understanding of the conditions in which CF can be effective in facilitating L2 development. Below, we will turn our attention to the relatively small amount of literature on the learner’s affective response to CF in L2 writing.

2.1.3.2 Learners’ affective response to CF

While learner affect is largely neglected in the literature of CF in L2 writing, in a natural educational context (e.g., classroom instruction), there are teachers who acknowledge the role of affect in L2 learning. These teachers consciously provide encouraging comments in addition to grammar error correction because, as Ferris and Hedgcock (2014) explain, “it is human nature to desire and appreciate favorable responses to the work that we have done” (p. 242). Hyland and Hyland (2001), for example, analyzed types of comments ESL teachers used in responding to their students’ writing and found that praise was most frequently used among three types of comments (praise, criticism, suggestion) they employed.

However, the feedback process is a complex social interaction and praise does not necessarily engender positive affective response from L2 learners. Hyland's (1998) qualitative case study vividly illustrates this point. One of the participants, Samorn (a Thai ESL learner), had her confidence shattered by the written CF she received from her teacher so much so that she changed her career plan at the end of the course in order to avoid English writing all together. In an interview, Samorn lamented that her teacher did not provide any praise on the grammatical part of her writing. Even though her teacher provided praise on global issues, it did not matter to Samorn because she cared so much more about grammatical accuracy than global issues in writing. Samorn's teacher had no idea how negatively Samorn had been feeling about her teacher's CF because it was Samorn's request to provide feedback on grammar. What Samorn did not tell her teacher was that she wanted her good grammatical knowledge to be acknowledged by her teacher in addition to receiving grammar error corrections for the purpose of improving her grammatical accuracy. Samorn's loss of motivation to write in English can also be understood in relation to Dörnyei's (2005) definition of motivation that focuses on the learner's self-concept. It appears that Samorn's L2 self, a student with good grammatical knowledge, was damaged by her teacher.

Mustafa's (2012) qualitative study also showed that written CF can induce strong emotional responses from the learners and what they do with the written CF may be dictated by their emotional responses to CF. The author explored what type of feedback Saudi students in a private ESL school in Canada ($N = 6$) received in their writing and how they reacted to the feedback by conducting interviews with the students using their L1, Arabic, which allowed the students to eloquently express their opinions. According to the students, they received authoritative teacher-centered written CF which focused on grammatical errors and mechanical

issues, and the CF was operationalized as implicit (coded and underlined) and focused CF which none of the learners found effective in facilitating learning of any sort. The author revealed, using qualitative content analysis of interview transcripts, that the learners' evaluation of CF is closely related to their emotional response to CF. First, the Saudi learners were dissatisfied with the feedback they received because it did not meet their needs. While the feedback they received was focused on grammatical errors, the students valued the meaning of their writing and thus wanted to receive feedback on global issues such as ideas and organization. For example, Muneerah commented: "little or no focus on ideas, stylistics, arguments or even organization, which in my opinion is pivotal" (p. 6). Second, the learners felt frustration in dealing with CF. Muneerah commented on a practical issue of illegibility: "I cannot decipher my teacher's handwriting" (p. 7). Abdullah expressed his frustration with implicit, coded CF: "I feel like I am in a cryptology classroom. I have to decipher the code before proceeding to the clue" (p. 7). Also, they found selective (focused) feedback misleading as represented by Majid's comment: "when he [the teacher] selects some errors and underlines them, he gives me the impression that everything else is OK. And the truth is far from that" (p. 7). Because of the frustration, Jawaher chose to ignore CF. He said "it is frustrating and drives me away from even considering the feedback" (p. 7). Though it was not identified by the author as such, an overarching theme that emerges from the personal narratives of the Saudi students reported in this study is that the feedback process failed to engage the agency of the learners. During the feedback process, they were passive recipients of authoritative CF who had no say in their learning and what they believed to be important (e.g., global issues such as idea and organization of text) was not even an agenda of the feedback process. Abdulla found his teacher's CF invasive: "... my teacher hijacks my writing. He underlines pieces, and sometimes long pieces, of my writing and rewrites

them again, and concludes his rewriting with ‘this is how a native speaker would do it’” (p. 7). Ali felt that he had no control of his learning: “we are in the dark when it comes to the feedback, I mean, the teacher decides what is best for us and that’s it” (p. 7). Perhaps, the only time the Saudi learners exercised their agency in the feedback process was when they chose to ignore the teacher written CF. Furthermore, the students’ negative responses to CF seemed to have extended to their perception that their teacher stigmatized them as students with weak grammatical knowledge and that their teacher had a negative view on Saudi students. Muneerah thought that her teacher believes that “he/she is Saudi, their feedback should primarily focus on grammar, because all Saudis are weak in grammar” (p. 7). Majid believed that “my teacher thinks we lack the desire to learn” (p. 7). These narratives suggest learner perception strongly impacts the efficacy of the feedback process. Participants of Mustafa’s study perceived from the teacher-centered written CF that their teacher had a negative view on Saudi students and thus their L2 identity was negatively co-constructed, similar to the case of Samorn in Hyland’s (1998) study above. Mustafa’s study lends support to the findings of Hyland (1998) that the learner as a whole person plays an essential role in the feedback process. While the use of personal narratives of Saudi students compellingly illustrated that CF could induce strongly negative emotions from the students which impede learning, the study was limited as a qualitative inquiry because the author did not triangulate the data source and solely relied on the students’ account. Emotions are socially constructed (Imai, 2010) and thus in order to fully understand learner affect-emotion associated with CF, research needs to focus more on the context by adding various data sources such as learners’ narratives, teacher interviews, class observations, and students’ writing samples with CF.

More rigorous investigation of L2 learner’s emotional response to teacher written CF was

conducted by Mahfoodh (2017) in a university EFL context in Yemen. The author employed grounded theory in analyzing learners' emotional response to teacher written CF from various data sources including think-aloud protocols, students' written texts and semi-structured interviews. The results of qualitative analysis was also numerically presented by the frequency of each code. In contrast to Mustafa's (2012) study, negative emotional response to teacher written CF was not very common. Most frequent learners' emotional response to the teacher written CF was *acceptance of feedback* (75.2%) and *rejection of feedback* was only 9.1%. While the percentage of negative emotional response (dissatisfaction, disappointment, and frustration) was low (6.1%), the percentage of positive emotional response (feeling of happiness, satisfaction) was even lower (4.9 %). Furthermore, it was shown that the learners' emotional response to the teacher CF influences whether the learner utilizes CF in their revision. This confirms the findings of Storch and Wigglesworth's case study (2010) which investigated the effectiveness of written CF on improving the revision process by analyzing the written texts for accuracy improvement in conjunction with the analysis of the pair discussion during the revision process. The authors reported that affective factors (e.g., learner's belief about what a good writing style is, learners' goals) influenced learners' acceptance or rejection of a certain type of CF, and the retention of the feedback.

The review of literature above suggests a crucial role of learner affect and perception in the feedback process in L2 writing. As Hyland (2010) puts it, it is the learner as agent who chooses whether or not to "exploit the potential of written corrective feedback" (p. 174) and therefore research that focuses on the different operationalization of CF without paying attention to learner affect cannot adequately account for the complexity of CF in L2 writing. Attention to affect alone also is inadequate. From the perspective that affect and cognition (e.g., acquisition

of grammatical structures) are dialectically united (Vygotsky, 1978), it is imperative to study learner affect in conjunction with the changes of linguistic ability to understand the complexity of the feedback process in L2 writing. The relatively small amount of CF in L2 writing research that has focused on learner affect is situated in the narrative inquiry tradition and thus independent analysis of the learner's L2 learning through CF in writing (i.e., accuracy improvement in new pieces of writing) was not included. This research gap in terms of methodology needs to be addressed by future CF in L2 writing research, for example, by employing a mixed-methods case study approach that includes both qualitative analysis of the learner narratives and analysis of linguistic ability (i.e., accuracy change).

2.2 Sociocultural approach to second language learning and CF in writing

This section describes sociocultural approaches to L2 learning and discusses how socioculturally-informed studies have contributed to the existing L2 writing research literature on the efficacy of CF by looking beyond the independent learner performance as the measure of CF efficacy, and beyond the Cartesian dichotomies prevalent in traditional SLA research. Sociocultural theory (SCT) is a general theory of mental development which was developed by a Russian psychologist Lev Vygotsky in the 1930s. Lantolf and Poehner (2014) define SCT as:

a theory that explains human psychology, including L2 development, as the dialectical unity of a biologically endowed brain functioning with socially generated forms of mediation that give rise to what Vygotsky called “higher” forms of thinking where humans deploy mediation appropriated through social activity to control (i.e., regulate) their mental functions (P. 7).

SCT-informed SLA research has proliferated since the publication of Lantolf and Frawley (1984) and Frawley and Lantolf (1985), and SCT has become one of the established theoretical

frameworks of L2 learning theories today (van Compernelle & Williams, 2013). As can be inferred from the definition above, SCT understands L2 learning quite differently from the traditional SLA theories. For example, according to the assumption of SCT, language learning is mediated by tools (most importantly by language, both L1 and L2), and language-based mediation takes place in the social interactions. In his exegesis of the sociocultural theoretical approach to L2 learning research, Lantolf (2005) highlights the difference between the traditional SLA theories and SCT in terms of assumptions of SLA theorizing. Lantolf (2005) remarks that while the traditional SLA theories assume that language acquisition occurs “exclusively and invisibly inside the head” (p.337), SCT postulates that “language acquisition takes place in the interactions of learner and interlocutor” (p. 336). Under the premise that language acquisition takes place in the social interactions, SCT-informed research cognizes the learner as a whole person with agency, emotions, histories, hopes, and desires, in contrast to the portrayal of the learners in the traditional SLA theories as “processing devices that convert linguistic input into well-formed (or not so well-formed) outputs” (Lantolf & Pavlenko, 2001, p.145).

Another striking difference between SCT and the traditional SLA theories is that SCT is grounded in a dialectic approach instead of Cartesian dualistic approach (Lantolf & Poehner, 2008, p. 3). The sociocultural theoretic approach to L2 learning perceives “the unity of seemingly contradictory process or entities and attempts not to disentangle that unity into what appears to be its component parts but to understand how the unity itself functions to achieve a particular end or goal” (Lantolf & Poehner, 2008, p. 4). L2 learning research literature, on the other hand, has traditionally used dichotomies, for example, between explicit knowledge and implicit knowledge, competence and performance, cognition and emotion, the individual and the social, and theory and practice. However, from the sociocultural perspective, these entities are

inseparably connected. For example, an extensive body of written CF research tried to determine which type of written CF, implicit or explicit, is more effective in promoting linguistic accuracy, but there is yet no consensus as to which type is more effective. Aljaafreh and Lantolf (1994), on the other hand, perceived the distinction between explicit and implicit CF to be more of a continuum. Based on the claims of SCT, they conceptualized effective CF in writing as CF that is appropriate to the learner's developmental level without separating explicit CF and implicit CF. Thus, for a particular linguistic error of a particular learner, it might be implicit written CF that facilitates L2 development most efficiently while it may be explicit written CF that is most effective when dealing with another particular linguistic error of the same learner.

Thought and language are not two separate entities in Vygotsky's theory. That is, language (speech or writing) is not just an audible or visible representation of thought; it can also mediate thought (Vygotsky, 1987). Thus, from the SCT perspective, the roles that language (or utterances) play in an L2 classroom are not limited to input/output, or linguistic evidence which provides information of licit and illicit forms of the target language. In the process of talking about the target language, for example, about grammatical errors that the learner produced in his writing, the learner can potentially gain a new understanding and develop his L2. Swain (2006) calls this type of dialogic interaction in which individuals use language as a cognitive tool to learn the target language *linguaging*, and argues that "linguaging about language is one of the ways we learn a second language to an advanced level" (2006, p. 96). From this perspective, oral CF in L2 writing (provided in one-on-one conferences) seems to have a great potential in facilitating L2 development though the majority of research on CF in L2 writing has exclusively focused on written CF and paid little attention to oral CF despite the popularity of writing conferences.

SCT posits that affect and intellect are inseparably connected in a dialectic unity and therefore learner affect is understood as one of the most important factors that facilitates learning. Yet, as Hyland, F. (2010, p. 174) remarks, there is a dearth of research that investigates learners' emotional response to CF in L2 writing, and she argues that explorations of learner affect is a crucial future direction for research on CF in L2 writing.

Furthermore, SCT challenges the dichotomy between the individual and the social (Lantolf, 2005, p. 341) and therefore an individual's cognitive process (e.g., L2 learning) is assumed to be inseparable from humanistic issues such as agency, which is constructed in social interactions (Lantolf, Thorne, & Poehner, 2014). By seeing the learner as agent, it follows that the efficacy of CF in L2 writing cannot be fully understood by solely focusing on the strategy of teacher CF because it is ultimately the learner who decides what to do with CF. The learner may notice the gap between what she wrote and the corrections provided by her teacher, but after all, it is the learner who chooses to accept, reject, ignore, or learn from the teacher CF.

Despite the proliferation of SCT-informed SLA studies, research on CF in L2 writing has rarely been informed by SCT. The majority of research on CF in L2 writing has focused on the role of teacher CF alone, and the learner has been perceived as a passive recipient who simply processes the linguistic input (i.e. CF). However, as Lee (2014a) explains, the feedback process is 'a social act' in which the role of the learner is a crucial factor in its efficacy since CF in L2 writing is a pedagogical practice which takes place in a social setting, the real classroom. Therefore, it is crucial to study social factors in an investigation of the effectiveness of CF in L2 writing. Recognizing CF in L2 writing as a social act, a growing number of L2 writing scholars have called for SCT-informed research on CF in L2 writing (e.g., Hyland, F., 2010; Lee, 2014a, 2014b). Hyland (2010) suggests that SCT-informed CF research which focuses on CF "within

the whole context of learning and on the learners' role in interpreting and using feedback" (p. 181) will further our understanding of the effectiveness of CF in L2 writing.

The following subsections describe the fundamental theoretical claims of SCT by focusing on its perspective on language learning and discuss how socioculturally-informed studies have contributed to the existing L2 writing research literature on the efficacy of corrective feedback (CF) in writing. In the first subsection, I elaborate on the most basic premise of SCT, *mediation*, along with closely connected constructs, *regulation* and *internalization*. I then discuss other core constructs of the theory relevant to the discussion of the effectiveness of CF in L2 writing. These include *the Zone of Proximal Development* and *agency*. In the second subsection, I review SCT-informed research on CF in L2 writing.

2.2.1 Core constructs in sociocultural theory

2.2.1.1 Mediation, regulation, and internalization

The central construct of Vygotsky's sociocultural theory which distinguishes it from other psychological theories is mediation (Lantolf, 2000). According to Vygotsky (1978), higher forms of mental activity are mediated by physical and psychological tools. Since both physical tools (e.g., hammer, telephone, computer) and psychological tools (e.g., number system, language) are products of human society over the course of history, SCT claims that "the mechanism of individual developmental change is rooted in society and culture" (Cole & Scribner, 1978, p. 7). For example, learning a second language is a form of higher mental activity. It can be mediated by culturally constructed physical tools such as grammar books, computer software, or Apps on smart phones. This form of mediation is called object-regulation. L2 learning can also be mediated by a human mediator (e.g., a teacher) who may use a psychological tool (e.g. learner's first language), for example, to correct the learner's

ungrammatical use of the article system in his composition. This interpersonal process is called other-regulation. After the learner goes through the interpersonal process for a long time, it changes into an intrapersonal process. The transformation of an interpersonal process into an intrapersonal process is called internalization. The state in which the learner internalizes the higher function is described as self-regulation. Vygotsky (1978) explains the process of internalization as follows:

Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first *between* people (*interpsychological*), and then inside the child (*intrapsychological*) (p. 57).

Development is conceptualized in SCT as “the process of gaining greater voluntary control over one's capacity to think and act” (Lantolf et al., 2014, p. 209), and therefore from the SCT perspective, an indication of L2 development is not limited to changes in linguistic outcomes based on the learner's independent performance, but it can also be found by analyzing changes in “the quality and quantity of negotiated mediation” (Lantolf, 2012, p. 60).

The method Vygotsky proposed to analyze the effects of mediation is called the *genetic method* (Vygotsky, 1978; Wertsch, 1985). Lantolf (2012) explains that the method is *genetic* because “the goal of research is to trace the development of thinking over time as it is being formed through external mediation” (p. 61). The genetic method focuses on the process of how the use of mediational means engenders qualitative transformation (Wertsch, 2007, p. 179), and thus it employs qualitative analysis of mediational processes (e.g., teacher-learner dialogue) in an attempt to “explain thinking by tracing its development over time” (Lantolf & Poehner, 2008, p. 2). The genetic method is quite different from the method employed in the traditional SLA research which analyzes the learner's independent production or performance because SCT

conceptualizes “shifts in the quality and quantity of negotiated mediation” (Lantolf, 2012, p. 60) as an indication of development. The application of the genetic method in CF in L2 writing research is discussed later in the review of Aljaafreh and Lantolf (1994).

In the discussion of development as a mediated process, Vygotsky also explains two important notions that we need to consider for understanding L2 learning from the sociocultural perspective. Vygotsky posits (1978) that: (1) the process of internalization takes place as “the result of a long series of developmental events” (p.57); and that (2) development is not upwardly linear and instead it proceeds “in a spiral, passing through the same point at each new revolution while advancing to a higher level” (p. 56). The sociocultural concept of development suggests that the research on the efficacy of CF in L2 writing should be longitudinal because: (1) we cannot expect the process of internalization to be completed in a short period of time with just one or two treatments of CF; and (2) we may not be able to see the L2 development in a short period of time as development does not proceed in upwardly linear fashion. As discussed in the review of CF in L2 writing literature above, most studies assume that effective CF should lead to accuracy improvement in the subsequent writing even after one CF treatment. However, from sociocultural perspective, an analysis based on such an assumption leads to misleading conclusions. This methodological weakness needs to be addressed in future studies.

Applying the notion of mediation by speech specifically to L2 learning, Swain (2006) argues that by talking about the target language, for example, about grammaticality of a particular phrase, we learn and develop our interlanguage. She termed the process of ‘talking-it-through’ (p. 97) to understand the target language as *linguaging*. Swain explains “through the process of talking-it-through – to another, with another or with the self – we may come to a new understanding, a new insight – we develop and learn (p. 97). Swain exemplifies her claim using

data sets from Watanabe (2004) which shows that a Japanese ESL learner came to understand written CF only after he talked about it with his partner who collaborated in writing the composition as a pair-task. Posttest results confirm that the learner retained the newly gained insight in his subsequent writing. Watanabe's data cited in Swain (2006) strongly suggests that speech (dialogue or languaging) is an important factor that makes CF in L2 writing effective.

2.2.1.2 *The zone of proximal development*

The ZPD is perhaps the most well-known construct of SCT because of its clear pedagogical implication for an instructional design. Vygotsky (1987) defines it as “a projection of a person's developmental future in the sense that what one can do in cooperation with others today one can do alone tomorrow” (p. 188). Vygotsky's (1978) proposal of the ZPD was inspired by his observation that children who are at the same developmental level based on their independent performance demonstrate different degrees of capability to learn while being assisted by a teacher. In his explanation of the ZPD, Vygotsky (1978, pp. 85-87) used the following hypothetical scenario. Suppose there are two children who can deal with tasks that are up to the difficulty level of eight-year-old and therefore they seem to be at the same developmental level. However, with assistance from an experimenter, the first child manages to handle the task of twelve-year-old difficulty level while the second child can only handle the task standardized for nine-year-old level. Vygotsky claims that children in such a scenario are at different developmental levels, and “This difference between twelve and eight, or between nine and eight, is what we call *the zone of proximal development*” (p. 86). The most frequently cited definition of the ZPD is as follows:

This difference between twelve and eight, or between nine and eight, is what we call the zone of proximal development. It is the distance between the actual

developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (p. 86)

Using the concept of the ZPD, Vygotsky argues that instruction should be sensitive to the learner's ZPD and only then instruction can effectively facilitate development (Poehner, 2005, p. 40). According to Vygotsky (1987), "the only good kind of instruction is that which marches ahead of development and leads it" (p. 188). Instruction sensitive to the learner's ZPD is effective because such instruction focuses on "functions that are in a stage of maturation lying in the zone of proximal development" (Vygotsky, 1987, p. 212). One of the crucial concepts of the ZPD, as Poehner (2005) observes, is that "function develops before it becomes measurable in practice" (p. 329). From this perspective, learners' independent performance, commonly used as evidence of L2 development in the CF in L2 writing studies, is not an accurate measure of L2 learning. SCT-informed studies, on the other hand, analyze a learner's assisted performance as evidence of learning. Vygotsky (1978, pp. 63-65) problematizes the analysis of the outcome (e.g., learner's independent performance) in the study of psychological activity, and argues for the analysis of the process as it goes under change.

2.2.1.3 Scaffolding

The notion of assisted performance, also known as scaffolding, has often been used in conjunction with the ZPD concept. Vygotsky and Luria (1930, cited in van der Veer & Valsiner, 1991, p.226) used the 'scaffolding' metaphor to describe the way how adults mediate children in their developmental process of learning to use cultural means. The 'scaffolding' metaphor has been extended to refer to the process that an expert (e.g., teacher, tutor, parent) helps a novice carry out a task by using supportive dialogue for the purpose of enabling the novice to become

self-sufficient in managing the task. Scaffolding is intuitive to a certain degree, as it is something parents naturally do to mediate children's development. Researchers who studied peer collaboration in the L2 learning context from sociocultural perspective found that not only experts (e.g. teacher) but also peers can provide scaffolding to each other and facilitate each other's L2 development (e.g., Donato, 1994; Ohta, 2000, 2001; Swain & Lapkin, 1998).

However, to provide effective scaffolding, as De Guerro and Villamil (2000) point out, a high degree of skill is required. Aljaafreh and Lantolf (1994) argue that for scaffolded assistance to be effective, it must be: (1) contingent so that assistance is provided only when it is needed; (2) graduated so that the expert can provide assistance sensitive to the novice's ZPD; and (3) dialogic because it is only through dialogic interactions that the expert can identify the novice's ZPD. In addition, Lidz (1991) postulates that affective factors (e.g., provision of praise and encouragement, expressing warmth and caring) influence the efficacy of scaffolded assistance.

2.2.1.4 Learning in the ZPD and affective factors

Though it was not considered in Aljaafreh and Lantolf (1994)'s work, the inclusion of affective factors as some of the components of effective scaffolding is in line with the claim of SCT that posits dialectic unity between cognition and emotion. Wells (1999), for example, explains that "Learning in the ZPD involves all aspects of the learner -- acting, thinking and feeling" (p. 331). Similarly, Mahn (2008) explains, by citing Chaiklin's work, that one's ZPD can expand or narrow due to a wide range of factors such as physical factors (e.g., hunger), emotional factors (e.g., anxiety, confidence), social factors (e.g., the way how one interacts with her peers), and so on. Although the dialectic relationship between cognition and emotion has received little attention among SLA studies grounded in SCT, according to Mahn and John-Steiner (2002, p. 46), it is of central importance for understanding Vygotsky's work as a whole.

Vygotsky (1987) explains the dialectic unity of thought and affect-emotions as follows:

[Thought] is not born of other thoughts. Thought has its origins in the motivating sphere of consciousness, a sphere that includes our inclinations and needs, our interests and impulses, and our affect and emotions. The affective and volitional tendency stands behind thought. Only here do we find the answer to the final ‘why’ in the analysis of thinking. (p. 282)

Moreover, Vygotsky’s claim regarding the dialectic unity of thought (i.e. cognition) and affect has been supported in recent years by a growing number of scholars who argue for the essential role of affect in language learning (e.g., Dewaele, 2005; Garrett & Young, 2009; Imai, 2010; Pavlenko & Dewaele, 2004; Schumann; 1997) as well as in human cognition in general (e.g., Panksepp, 1998).

Although it has been overlooked in the research on CF in L2 writing, the review of literature above suggests that the relationship between cognition and affect is an important variable to consider in the investigation of the effectiveness of CF in L2 writing. Since the feedback practice can engender powerful emotional responses from L2 learners (e.g., Hyland, F., 1998; Mahfoodh, 2017; Mustafa, 2012), learner affect might be the key to making sense of conflicting results of previous studies and understanding why certain operationalization of teacher CF is more effective than others. In the next subsection, we will turn our attention to learner agency, one of the affective factors, which has been more neglected than emotion in the literature of CF in L2 writing.

2.2.1.5 Agency

According to van Lier (2008), agency is an umbrella term for “issues such as volition, intentionality, initiative, intrinsic motivation and autonomy” (p. 171). SCT conceptualizes

agency as a behavior of learners rather than a property of learners by viewing agency as “not simply an individual character trait or activity, but a contextually enacted way of being in the world” (van Lier 2008, p. 163). As Swain (2006) remarks, **SCT** sees the learner as agent, who “perceives, analyses, rejects or accepts solutions offered, makes decisions and so on” (pp. 100-101). In discussing the relevance of agency in L2 learning, Lantolf and Pavlenko (2001) argue that **“learners have to be seen as more than processing devices that convert linguistic input into well-formed (or not so well-formed) outputs. They need to be understood as people,** which in turn means we need to appreciate their human agency” (p. 145). **An illustration of the learner** as agent comes from Swain (2006, pp. 100-101). In her work, Swain qualitatively analyzes two Japanese ESL learners’ discussion during a revising process of a composition they wrote collaboratively after they received authoritative written CF in the form of reformulation from a native speaker researcher. In analyzing the dyad, Swain points out that one of the learners, Ken, noticed the gap between their original sentence and the researcher’s reformulation, but he chose to ignore it because what the researcher wrote did not make sense according to Ken’s understanding of the grammar in question. Swain’s (2006) analysis lend support to the claim of Lantolf and Pavlenko (2001) by demonstrating that the feedback process is not mere input processing but it involves learner agency, suggesting the relevance of agency in research on the efficacy of CF in L2 writing.

2.3 Sociocultural research on CF in L2 writing

The majority of the research on the efficacy of CF in L2 writing is influenced by cognitivism, and SCT-informed research on teacher CF in L2 writing is scarce. To the best of my knowledge, there are only four such published studies. The purpose of this subsection is to review the few studies in detail to illustrate how CF was operationalized, how L2 development

was conceptualized, and what constitutes evidence of L2 learning from sociocultural perspectives. Lastly, directions for future sociocultural research on CF in L2 writing is discussed.

Aljaafreh and Lantolf (1994). A seminal study which deployed principles and concepts of SCT in CF on L2 writing was conducted by Aljaafreh and Lantolf (1994), who operationalized CF as other-regulation sensitive to the learner's ZPD. Since dialogic negotiation is necessary to discover the learner's ZPD, CF in this study was provided orally. Participants were three ESL learners enrolled in an eight-week ESL writing and reading course at a university in the U.S. They received one-on-one writing tutorials from one of the researchers during which participants were asked to self-correct their grammatical errors in their compositions. The researcher helped the self-correction process by guiding the participants to notice the error, then providing hints for correction, and finally providing the correct form and metalinguistic explanations if deemed necessary. The researcher made his help gradually more explicit in order to provide help that was just right for the learner's developmental level. In contrast to the majority of research on CF in L2 writing which analyzed the learner's independent performance (i.e., accuracy change in new pieces of writing) as evidence of L2 learning, the authors analyzed interactions between a tutor and an ESL learner using Vygotsky's genetic method to illustrate how microgenesis (i.e. the process of internalization of the target grammatical structures in the specific context of the tutorials) arises through dialogic CF by focusing on highly recursive errors including articles, tense marking, use of prepositions, and modal verbs. In addition, the researchers analyzed the types of help that emerged in the interactions and reported them as the regulatory scale (see Table 2.1), which has been utilized in the subsequent sociocultural research in CF. Through careful scrutiny of the researcher-learner dyads, the authors described how negotiated CF process unfolded and whether it facilitated L2 development. For example, in one

of the tutoring sessions, the researcher helps a participant called N (L1 Spanish) with his erroneous use of the modal *can* in the sentence ‘One of my dreams for my future is *can* go to Germany’. When this error appears for the first time during a tutoring session (protocol G), N cannot identify the error, cannot correct it by himself, and cannot understand why *can* needs to be replaced by *to*. It is only after listening to the explanation provided by the researcher that N realizes why the phrase ‘... is *can* go to Germany’ is ungrammatical. After this realization, N expresses his frustration for not being able to write correctly, the researcher provides encouraging comment pointing to other accomplishments of N, but N continues to criticize his writing and asks himself out loud ‘Why I write bull shit?’. In this protocol, the target grammatical structure was low in N’s ZPD and therefore he required a lot of help in terms of both quantity and quality of scaffolding. Later in the same tutoring session (protocol H), the same modal *can* error appears in a different sentence ‘Another dream mine is *can* go to Japan’. In this protocol, N’s utterances demonstrates a shift toward self-regulation. When he reads the sentence in question out loud, he stops at ‘Another dream mine is’ and then says that he is able to correct this sentence now. He changes ‘can go’ into ‘to go’ by commenting that it is the same error again. The reduction of help N required is considered to be evidence of L2 development in the genetic method. Although this study does not establish causal relationship between ZPD sensitive CF and L2 development, the evidence provided in the microgenetic analysis compellingly illustrates N’s shift toward self-regulation and suggests the efficacy of dialogic CF on L2 writing. Based on their findings, Aljaafreh and Lantolf argued that effective CF is CF adjusted to the individual learner’s developmental level, or their ZPD. Thus, both explicit CF and implicit CF can be the most effective CF strategy at different times depending of the learner’s developmental level of a given grammatical structure.

Table 2.1 *Regulatory Scale of Implicit to Explicit Help*
 (modified from Aljaafreh & Lantolf, 1994, p. 471)

-
0. Tutor asks the learner to read, find the errors, and correct them independently, prior to the tutorial.
 1. Construction of a “collaborative frame” prompted by the presence of the tutor as a potential dialogic partner.
 2. Prompted or focused reading of the sentence that contains the error by the learner of the tutor.
 3. Tutor indicates that something may be wrong in a segment (e.g., sentence, clause, line).
 4. Tutor rejects unsuccessful attempts at recognizing the error.
 5. Tutor narrows down the location of the error.
 6. Tutor indicates the nature of the error, but does not identify the error.
 7. Tutor identifies the error.
 8. Tutor rejects learner’s unsuccessful attempts at correcting the error.
 9. Tutor provides clues to help the learner arrive at the correct form.
 10. Tutor provides the correct form.
 11. Tutor provides some explanation for use of the correct form.
 12. Tutor provides examples of the correct pattern when other forms of help fail to produce an appropriate responsive action.
-

This seminal study made a significant contribution to the field by examining CF in L2 writing from a sociocultural perspective. Furthermore, one can generate directions for future sociocultural research on CF in L2 writing by considering issues that were not addressed in this study. The genetic analysis demonstrated the nuanced process of L2 development by tracking

how the quality of tutor's help required by the learner changed within and across tutoring sessions, which would have been missed if the measure of the outcome was the learner's independent performance alone. However, it remains unclear whether or not self-regulation observed in the selected protocols eventually led to accuracy gain in new pieces of writing, which is the central question of current CF in L2 writing research. We also do not know what happened outside of the selected protocols which demonstrated an upwardly linear improvement pattern. Also, as acknowledged by the authors, the linguistic features investigated are limited as they are language specific "surfacy" features. Future studies need to investigate if other syntactic properties especially of a language other than English can also be treated by dialogic CF.

Lantolf and Aljaafreh (1995). Using the data obtained in their earlier research (Aljaafreh and Lantolf, 1994), the authors provide evidence to support one of Vygotsky's claims that development, in this case, L2 development, and is not an upwardly linear process. Unlike their earlier study, the authors selected protocols that showed regression in collaborative dialogic CF sessions in an attempt to show that L2 learning is a revolutionary experience as claimed by Vygotsky. This study complements the previous study by showing that L2 development goes through a series of stages involving both progression and regression. Although this study has received little attention in the literature of CF in L2 writing, there is much to be gained from this study. It suggests that the common assumption of the field of CF in L2 writing that equates lack of upwardly linear L2 development (i.e., accuracy improvement) and inefficacy of CF requires reconsideration.

Nassaji and Swain (2000). This is a follow-up study of Aljaafreh and Lantolf (1994). Nassaji and Swain examined, through a pilot experimental study ($N = 2$), whether dialogic CF sensitive to the learner's ZPD is more effective than CF that does not consider the learner's ZPD.

Nassaji and Swain addressed some of the limitations of Aljaafreh and Lantolf's study by establishing causality with the use of controlled experimental design, and by demonstrating linguistic learning outcomes more systematically by tallying the number of correct usage of the target linguistic feature, the article system, along with the number of obligatory contexts in each of four compositions. The authors also used a pretest-posttest design to show the change manifested in the learners' independent performance quantitatively. They also analyzed the researcher-participant dyads using genetic method.

Two Korean ESL learners studying at a Canadian university participated in this study. They were asked to write a composition on the topic assigned by the researcher weekly for four weeks, and they participated in a weekly writing tutorial conducted by the researcher. The authors focused on the article system in the analysis although every error in the composition was addressed during the tutorial sessions. The general procedure was similar to Aljaafreh and Lantolf's (1994) study except that there were two treatment procedures. One participant was assigned to a ZPD treatment procedure in which she received dialogic CF sensitive to her ZPD. The researcher utilized Aljaafreh and Lantolf's (1994) regulatory scale and tried to provide CF that was just right for the participant's developmental level. The other participant was assigned to a non-ZPD treatment procedure. The researcher provided CF on the article errors by randomly selecting the level of explicitness from the regulatory scale. As a result, the interaction was unnatural and the problem was unresolved when the researcher's CF was not explicit enough. The researcher also provided CF on other errors too, but how that CF was provided was not reported. The results lend empirical support to the claim of Aljaafreh and Lantolf (1994) that dialogic CF sensitive to the learner's ZPD facilitates L2 development. Results from the qualitative analysis show that the learner in a ZPD condition was able to correct her errors with

less explicit help after receiving the initial corrective help from the researcher on the same error, which confirmed the findings of Aljaafreh and Lantolf (1994). In addition, the quantitative analysis of test scores showed that the learner in a ZPD condition made significantly higher accuracy gain than the learner in a non-ZPD condition. Although this study provided the results more systematically with controlled experimental design, we have to be cautious in interpreting the results since the number of the participants of this pilot study was only two. In addition, this study also does not show if the participant who received ZPD sensitive CF would produce more accurate new pieces of writing. The tailor-made posttest used in this study was a cloze test which is basically the participant's original draft but the articles were left blank. This laboratory experiment-like design does not quite align with Vygotsky's idea that "the ultimate test of a theory is to be found in the real world" (Lantolf & Poehner, 2014, p. 8). In the real world of ESL students who are enrolled in a writing course, their learning outcome is measured by their (new pieces of) writing, and not by a tailor made cloze test. Also, the study design does not reflect the real context of feedback practice where L2 learners receive CF from their teacher with whom they developed certain relationship, and where they have a goal to achieve when they write (e.g., to get a certain grade in the course so that they can be admitted to an undergraduate program). Therefore, as Hyland (2010, p. 180) argues, in order to generate information that is useful for educators to understand their students and their L2 learning for the purpose of the improvement of pedagogy, research on CF in L2 writing needs to have high ecological validity. Also, as was the case with Aljaafreh and Lantolf's (1994) study, the authors did not address learner affect and agency. The linguistic feature investigated is also quite limited.

Erlam, Ellis, and Batstone (2013). According to the authors, the results of this study provide counter evidence to the findings of Aljaafreh and Lantolf (1994), and Nassaji and Swain

(2000). The authors followed the procedure similar to that of Aljaafreh and Lantolf (1994); ESL students composed a text alone, and then participated in a writing tutorial in which the tutor provided ZPD sensitive CF utilizing the regulatory scale of Aljaafreh and Lantolf (1994). The authors conducted microgenetic analysis of the protocol and traced how the quality of assistance changed each time the participants encountered the same error. The results were presented quantitatively by utilizing the numerical values of the regulatory scale. This method of data presentation was systematic and allowed one to see the whole process as opposed to the process that took place in some selected protocols. The results did not show upwardly linear progress towards self-regulation and therefore the authors concluded that there was no evidence which shows that dialogic CF facilitates L2 development. However, the authors appear to be misguided by Aljaafreh and Lantolf (1994), which only discussed protocols demonstrating linear progressions, and thus Erlam et al. failed to understand the SCT perspective on L2 development. As Aljaafreh and Lantolf clarified in their later study (Lantolf & Aljaafreh, 1995), SCT conceptualizes L2 development to be nonlinear involving progression and regression. Hence, the lack of linear progression does not necessarily indicate the lack of development. Thus, unlike the claim of the authors, this study does not prove that Vygotskian dialogic CF in L2 writing is an ineffective strategy of CF. However, this study made a noteworthy contribution to the field by showing how one can present the result of Vygotsky's genetic analysis systematically and quantitatively by making use of the regulatory scale of Aljaafreh and Lantolf (1994).

To conclude this section, I have presented fundamental claims of sociocultural theory regarding L2 learning in an attempt to demonstrate how sociocultural perspectives can shed new light on the debate about the efficacy of CF in L2 writing. Then, I defined core constructs of SCT and proceeded to discuss how these constructs have been applied to the research on CF in L2

writing. The review of the few SCT-informed studies on CF in L2 writing revealed that learner affect has been overlooked though affect plays an essential role in learning according to the claims of SCT.

2.4 Conclusion

I have presented in this chapter the predominant focus and theoretical assumptions of previous CF in L2 writing studies and that the field is still far from getting a definitive answer with respect to the effectiveness of CF in L2 learning.

An important research gap emerging from previous studies is the neglect of affective factors in the feedback practice, based on which I argue that sociocultural research on CF in L2 learning that conceptualizes the learner as a whole person with agency would add to the field by enriching our understanding of the complexity of the feedback process in which “a multiplicity of social and cognitive factors play an inseparable role” (van Lier, 2004, p. 140). I have also introduced calls for qualitative research in the field. The majority of previous studies had experimental or quasi-experimental designs aiming to establish the causal relationship between CF and learning outcomes. While findings of such studies with reductionist approach have advanced the field, we also need qualitative studies that investigate unquantifiable variables such as learner affect in the feedback process which has been recognized as a social practice by a growing number of scholars. Other research gaps are related to the type of learners (target language and the proficiency level), operationalization of CF, linguistic features, and the analysis of the linguistic outcomes.

To address these research gaps, the present study set out to investigate the impact of CF:

- (1) on a wider range of linguistic error categories with L2 learners of non-European languages,
- (2) with less advanced learners, including elementary level learners who require CF in their L1,

(3) using more nuanced evidence of accuracy gain by using Vygotsky's genetic method, (4) with Vygotskian dialogic CF, which aims to provide help appropriate to the student's current level and (5) holistically by considering both learner affect and linguistic outcomes.

The present study attempts to address these five research gaps by employing a case study approach which holistically investigates the effectiveness of dialogic CF on L2 writing of lower level Japanese learners by looking at a wider range of linguistic errors and the way the errors change in subsequent writings as well as in interactions during writing conferences, in conjunction with the learners' emotional response to CF. More specifically, the main goal of this study is to examine: (1) how elementary-intermediate level English-speaking learners of Japanese in a university context respond linguistically and emotionally to Vygotskian dialogic CF in their writing, (2) how they develop their L2 Japanese accuracy by receiving such CF in their writing, and (3) how they perceive their L2 learning through dialogic CF. The overarching aim of the proposed study is not to establish a causal connection between a specific strategy of CF and accuracy improvement or particular type of learner affect. Rather it aims to holistically describe the complexity of the CF process by focusing on the context and unquantifiable humanistic issues while at the same time analyzing evidence of the effectiveness of dialogic CF in new pieces of writing (i.e., learners' independent performance) as well as in interactions (i.e., learners' assisted performance) with a longitudinal case study design, which will be presented in the following chapter. The research questions of the proposed study are as follows:

1. How do elementary and intermediate level English-speaking learners of Japanese as a foreign language (JFL) respond to dialogic CF with respect to use of Japanese grammatical structures?
2. How do elementary and intermediate level English-speaking JFL learners respond to

dialogic CF with respect to inter- and intrapersonal issues such as affect-emotion and learner agency?

3. How do elementary and intermediate level English-speaking JFL learners perceive their own language learning through dialogic CF in their writing?

3 METHODOLOGY

The objective of this study emerged from a pedagogical concern: how best an L2 teacher can provide CF on her students' writing in a university level foreign language context. More specifically, the overarching goal of this study was to examine how elementary-intermediate level English-speaking learners of Japanese in a university context respond linguistically and emotionally to dialogic CF in their writing. The research questions of this study are as follows:

1. How do elementary and intermediate level English-speaking learners of Japanese as a foreign language (JFL) respond to dialogic CF with respect to use of Japanese grammatical structures?
2. How do elementary and intermediate level English-speaking JFL learners respond to dialogic CF with respect to inter- and intrapersonal issues such as affect-emotion and learner agency?
3. How do elementary and intermediate level English-speaking JFL learners perceive their own language learning through dialogic CF in their writing?

In order to answer the research questions, I conducted a mixed-method longitudinal multiple case study. In the following subsections, I first explain the rationale for my methodological choice. Then, I provide a detailed description of the context, participants, my role as a researcher, and data collection procedure. Finally, the last subsection discusses data analysis.

3.1 Rationale for a case study approach

The aim of the present study, which is grounded in sociocultural theory, is to holistically examine each participant's unique experience with dialogic CF on their L2 writing by paying close attention to individual cases. Since sociocultural theory conceptualizes that L2

development demonstrates variability at the level of the individual (Lantolf & Thorn, 2007, p. 724), close attention to individual cases, as opposed to aggregated group data, is of great importance to this study. Also, holistic examination of a phenomenon of interest (in the case of this study, L2 learning through dialogic CF) is indispensable. For example, context which has received little attention in CF in L2 writing research has great importance in understanding the efficacy of CF in L2 writing from sociocultural perspective which claims that that “the source of development resides in the environment rather than in the individual” (Lantolf, 2006: 726). Similarly, van Lier (2004) explains that, from an ecological and sociocultural perspective, context is “not just something that surrounds language, but that in fact defines language, while at the same time being defined *by it*” (p. 5, italics original).

The overarching goal of the present study warrants a case study approach because in essence case study selects one or more single bounded entities as the case (e.g., a person, site, situation) for study and “provide concrete instances of a phenomenon of interest” (Duff, 2013, p. 1) with an underlying theoretical philosophy that “much can be learned by looking both holistically and in close detail at the behaviors, performance, knowledge, or perspectives of just a few rather than many research subjects” (Duff, 2013, p. 6). A case study approach allows the researcher to better understand each participant’s unique course of L2 development and accompanying learner affect in a holistic way with rich contextualization, which makes inductive analysis possible (cf. Duff, 2013). Furthermore, as the case study zeros in on a case, it is possible to “track and document change (such as language development) over time” (van Lier, 2005, p. 195), which may not be possible with other common research methods which examine single snapshots of learning outcomes such as laboratory experiments and direct testing. The possibility of tracking change over time is a significant advantage of a case study approach for

the present study because sociocultural theory conceptualizes language learning as a process of emergence instead of as linear, gradual acquisition (e.g., Lantolf, 2006). As van Lier's (2004) explanation of emergence below clarifies, the sum of snapshots of learning outcomes cannot accurately represent second language learning.

Emergence happens when relatively simple elements combine together to form a higher-order system. The whole is not only more than the sum of its parts. The new system is on a different scale, and has different meanings and patterns of functioning than the simpler ingredients had from which it emerged. In language, grammar emerges from lexis (Bates & Goodman, 1999), symbols emerge from tools (Vygotsky, 1978), learning emerges from participation (Lave & Wenger, 1991). Language proficiency emerges from all these transformations. (van Lier, 2004, p. 5)

According to van Lier (2005), case study research is “a key method for researching changes in complex phenomena over time” (p. 195). Similarly, Merriam (1998) acknowledges the efficacy of case study research in understanding complex phenomenon. She writes, “The case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon” (p. 41).

3.2 Research context

The data for the present study was collected from the fall 2014 to the summer 2015 at a large public research university in the Southeast of the United States where I have taught Japanese courses. The student body of the university is quite diverse consisting of more than 1,500 international students and students with various racial backgrounds of Asian (13%), Black (38%), Hispanic (8%), White (37%), and Other. A considerable number of students are so-called

first generation students (i.e., the first person to attend university in the family) and also in high need of financial assistance who may not be able to achieve academic success without support from the university. The university has been recognized for its effort to help students with academic success, especially in the areas of student retention rate, rapidly growing graduation rate, and high number of degrees conferred to students of color.

The Japanese program of the university, which offers Japanese minor, is relatively small with two full-time faculty members and occasionally one graduate teaching assistant. The number of Japanese courses offered in an academic year is 15 ranging from Elementary Japanese I to Advanced Japanese II. All of them are 3-credit courses which meets twice or three times per week for the total of 150 minutes. Approximately 30 students are enrolled in these courses with the maximum student number per course of 30, and the minimum of 15. The Japanese population in the city where the university is located is rather small, and most students do not have a chance to interact with Japanese people outside of their classroom.

Permissions from the Georgia State University Research Office were obtained before the data collection started, and my request to use the data for my dissertation was granted in 2015.

3.3 Participants

Participants were selected through purposive sampling (Stake, 1994). From among the students I taught or interacted with over the past a few years, I identified three students who met the following criteria: (1) a native speakers of English; (2) proficient enough to produce at least one paragraph of Japanese writing; and (3) seemingly would be able to commit to the present study by producing one composition per week and attending the writing conference based on their interest in Japan. I recruited them through an email advertisement and two students expressed interest in participating in the study. After receiving an email reply, I met with the two

students individually to explain the study in more detail by going over the procedure of writing conference and the time commitment required. Both students agreed to participate at our first meeting and signed the informed consent (see Appendix A). I decided to begin the project with these two participants because typical number of case study participants is between two and six in the field of applied linguistics (cf. Duff, 2008). In addition, these two students happen to have such different backgrounds (gender, race, university major, etc.) that they function, in effect, as maximum variation sampling. I purposely chose students who knew me as their teacher or a teacher in their Japanese program because investigating dialogic CF conducted between a teacher and a student would have more pedagogical value and more ecological validity than that conducted between a researcher and a learner. As I had developed good rapport with both participants before conducting this study, I considered both of them as information-rich participants who would willingly share their student perspectives with me. However, I am also aware that our teacher-student relationship might have had influenced the kind of data, especially interview data, I was able to collect (cf. Patton, 2002). As Duff (2012a, p. 110) explains, “interviews are co-constructed speech events” which “yield a partial representation of reality (or truth).” I will disclose my reflexivity about my relationship to the participants and how it might have influenced the shaping of the present study in the subsection entitled ‘researcher role’ so that my audiences can interpret the results of this study accordingly.

For the purpose of maintaining participant anonymity, I use pseudonyms for participants’ names and I do not identify the schools participants attended. I also do not share exact age of the participants and their major in an attempt to keep participants anonymous even for those who are familiar with the context. I also have shown drafts of this dissertation to my participants for member checking to ensure that there is no information about them which they feel

uncomfortable with. Both participants approved my description of them and provided me with supportive feedback². Participants' background information is summarized in Table 3.1 followed by their brief descriptions.

Table 3.1 *Background Information on Participants*

Name	Major area	Age	Native Language	Length of Japanese Studies in U.S. (proficiency)	Length of Stay in Japan
Tina	Humanities	Early 20s	English	3 years (Intermediate)	1 year
Felix	Natural Science	Late 20s	English	3 years (Elementary)	1 month

Tina, a cheerful and congenial first generation African American student in her early twenties, became interested in Japanese when she discovered Japanese rock music in high school. She even traveled to Japan to attend the concert of a rock group she especially liked. Tina started her formal study of Japanese in a community college, and continued to study Japanese at the university where I taught. Then her interest in Japan grew so much stronger that she decided to study in Japan for one year through an exchange program which I directed. As an exchange program director, I took care of Tina and I considered her as my student though she was never in my class. Tina also described me as her teacher during a focus group interview conducted by my colleague. Tina's Japanese proficiency improved significantly through this program and her proficiency level was high-intermediate (she passed Japanese Language Proficiency Test (JLPT) level N3) when she returned to the US. Tina returned to the US shortly before the beginning of this study, and she reported that she considered participation in this study as a great opportunity to continue using Japanese. In particular, she wanted to become able to

² I found it interesting that my participants' feedback on my writing was nice and supportive, like the kind of feedback I tried to provide for them. I feel as if I taught them how to respond to someone's writing, or at least, I have influenced them to a certain degree.

express her feelings and emotions eloquently in Japanese because that is what she wanted to do with her friends in Japan. Tina was strongly determined to improve her Japanese so that she could find a job in Japan upon graduation, either as an English teacher or a hospitality staff member at Tokyo Disney Land or Disney Sea. Towards the end of data collection, she received a job offer from a competitive government-sponsored program called the Japan Exchange Teaching (JET) Program to teach English in Japanese public schools, and she now happily lives in Japan. Topics of her compositions reflected her goal of expressing emotions in Japanese and she wrote about very personal matters such as breaking up with her boyfriend, meeting a new man through an on-line dating website, and her inner struggle regarding separating from him before moving to Japan, among other topics.

Felix, Caucasian, non-first generation student, was a person with a quiet and gentle demeanor. In high school, he enjoyed watching Japanese movies as well as reading Emerson's and Thoreau's work. Felix began his Japanese studies when he became a college student. I met Felix as a student in two of my Japanese courses. He was a diligent student who dedicated a great amount of time to his studies. We also traveled to Japan together through a one-month summer study abroad program which I directed. Felix never took JLPT but I estimate his proficiency level to be between JLPT N5 (lowest level) and N4 (second lowest level) based on my professional judgement and the number of instruction (or contact) hours he received. His future plan after graduation was to earn a doctorate degree in his field, and to find a job in an international company where he could potentially use his Japanese skills as well as the specialized knowledge of his field. Felix reported that the ability to write in Japanese is relevant to his career goals because he could be in a position at work in which he corresponds with Japanese people via email. During the first interview conducted right before the first writing

conference, Felix expressed his hope of becoming able to express his ideas clearly in Japanese. Accordingly, in his compositions he often wrote about his ideas. At the end of data collection, Felix was planning to apply to PhD programs both in the U.S. and in Japan.

3.4 Researcher role

I played three roles in the present study; a researcher, a teacher who conducted writing conferences which were conducted for research purposes, and the participants' (former) Japanese teacher. In my researcher role, I strived to collect data for qualitative analysis that are trustworthy and also tried to capture the participants' perspectives accurately as much as possible. However, it is commonly assumed that the researcher's background influences what data she can obtain. For example, Duff (2012a) cautions us that interviews "do not necessarily generate complete or accurate versions of interviewee's perspectives" because in the discourse context of the interview, the interviewee may be "constrained by the interviewer (whom the interviewee might want to please or, perhaps, whose judgment might be feared) in untold ways" (p. 110). Hence, I interpreted interview data while reflecting on my relationship with the participants. In addition, I triangulated the individual interview data with the focus group interview (conducted by a colleague to increase the trustworthiness of my interpretation) data. Furthermore, below I will share my background information relevant to this research so that my audiences can understand how who I am, and my relationship with the participants might have influenced my analysis, findings, and interpretations.

I am a middle-aged, middle-class Japanese female with experience of teaching JFL for several years in North America. I am a native speaker of Japanese from Tokyo and speak English fluently enough to function as an instructor of Japanese at a university in the U.S. In addition to being a language instructor, I am an English as an additional language speaker

struggling to improve her L2 writing. My research interest emerged from both of my roles. As an instructor of Japanese in a foreign language context, I have long wondered, based on my non-systematic observation, why my students' linguistic accuracy did not improve despite the provision of my written CF. As an L2 writer in a PhD program, I have realized: (1) how difficult it is to improve my L2 English writing; (2) how persistent my grammatical errors in writing are; and (3) that teacher CF can make strong affective impact on an L2 student/writer. I would like to think that I was not merely a researcher, but also an L2 writer/recipient of teacher CF. I was able to sympathize with my participants, which in turn enabled me to interpret the data from a learner's perspective.

As I have mentioned briefly, I had already developed good rapport with the two participants before the data collection began. Felix, was a student of my Japanese course for two semesters and he had visited me many times during my office hours. We also went to Japan together through the summer study abroad program. In the focus group interview, Felix explained to my colleague that I was like his friend as well as his teacher though I considered him only to be my student following the cultural norm of Japan. Nonetheless, I cared about him and his success (in general and as a learner of Japanese). For example, I offered to write recommendation letters for him, and Felix requested three of them for his graduate school applications. Tina, never took my Japanese courses, but she participated in the exchange program that I directed and I had developed a teacher-student relationship with her while preparing her trip to Japan. As the director of the exchange program, I held a farewell party for her at my home, assisted her throughout her stay in Japan, and we kept email correspondence while Tina studied in Japan. Tina described our relationship as a teacher and a student during the focus group interview, and the feeling was reciprocal. I cared about her as my student and I wanted her

to be successful in learning Japanese and in her career in general. I offered help (e.g., advice, a recommendation letter) when she needed it.

I believe because of the positive rapport I developed with them, both students were information rich participants who openly shared their perceptions and took every aspect of research seriously (e.g., by emailing me their writings by the due date, producing long-enough writing each time, keeping appointments for the writing conferences, taking enough time to reflect on interview questions and providing elaborate responses) and I was able to retain their long-term research participation for 10 or 12 months respectively. However, I must also note that, our positive teacher-student relationship may have influenced interview responses. It is possible that my research participants avoided sharing negative comments about the dialogic CF I provided. Both students seemed to have respected me as their teacher, and therefore it is possible that they withheld negative comments or negative emotional responses to the dialogic CF that I provided. In order to overcome this constraints, I included a focus group interview which was led by my colleague.

3.5 Data collection

The data was collected over a twelve-month period with multiple data gathering instruments including individual interviews, stimulated recall interviews, a focus group interview, audio-recordings of writing conferences, learners' compositions (first draft, first draft with notes exclusively for myself as a guide for dialogic CF, first draft with notes taken during the dialogic CF by the participants and me, and revised draft), and field notes in which I kept a record of my observations and my reflections on the writing conferences. Prior to the data collection of the present study, a pilot study with one participant was conducted which served to determine whether the research idea was promising, and to fine tune the data collection

procedures and the execution of writing conferences. An overview of data collection procedure is shown in Table 3.2.

Table 3.2 *Overview of Data Collection Procedure*

Time	Participant	Writing Conferences	Interviews
<i>Pilot study</i>			
Fall 2013 Aug - Nov	Finn	Six conferences conducted in English (one hour each)	One interview at the last conference in English
<i>Current study</i>			
Fall 2014 (Phase 1) Aug -Nov	Tina	Ten conferences conducted in Japanese (one hour each)	One interview at the beginning and one at the end of the semester conducted in English
	Felix	Nine conferences conducted in English (one hour each)	
Summer 2015 (Phase 2) May - Aug	Tina	Five conferences conducted in Japanese (one hour each)	One stimulated recall and one focus group interview conducted in English
	Felix	Six conferences conducted in English (one hour each)	

3.5.1 Interviews

As Duff (2008) explains, one of the most common data collection procedures in case studies in the field of applied linguistics is an interview. Interviewing allows the researcher to find out things that cannot be directly observable such as feelings and thoughts (Patton, 2002). The purpose of interviewing, according to Patton (2002, p. 341), “is to allow us to enter into the other person’s perspective.” In an attempt to enter into the two JFL learners’ perspectives, three types of interviews, including two semi-structured interviews, a focus group interview, and a stimulated recall interview, were conducted. All interviews were conducted in the participants’ first language, English so that they could express their thoughts explicitly and elaborately. All interviews were audio-recorded and transcribed for analysis.

3.5.1.1 Individual semi-structured interviews

I conducted two semi-structured interviews, one before the first writing conference and one at the end of Phase 1 of data collection. Participants were interviewed individually. The aim of the first interview was to find out: (1) participants' opinion about CF in writing; (2) what they hope to gain through participating in this research project; (3) their perceived weaknesses and strengths with respect to their Japanese proficiency; and (4) their motivation for studying Japanese. The first interview lasted for about five minutes for both participants (See Appendix B for the interview questions). The second interview was conducted in order to learn about participants' retrospective response to dialogic CF and their perception of language learning through dialogic CF. The second interview lasted about 15 minutes for both participants (See Appendix C for the interview questions).

3.5.1.2 A focus group interview

In order to enhance the quality and credibility of data, a focus group interview was conducted. Patton (2002) defines a focus group interview as “an interview with a small group of people on a specific topic” (p. 385) which is used to obtain different perspectives. According to Bryman (2012, p. 502), a focus group interview is a form of a group interview that *focuses* on a specific topic which allows the researcher to observe “the joint construction of meaning” through interaction of group members. Although a focus group interview can be facilitated by the researcher, I had a colleague to facilitate it in order to increase the credibility of one-on-one interview data which might have been influenced by our teacher-student relationship. A focus group interview was conducted during Phase 2 by my colleague who was familiar with qualitative research methodology. My colleague shared a similar background with the participants (an American JFL learner who lived in Japan as an English teacher) and successfully

developed a good rapport with the participants and engaged them in a lively discussion by creating a comfortable and enjoyable atmosphere. Tina and Felix participated in the focus group interview, and multiple interactions, not only between the interviewer and the participant, but also between the participants, occurred in the focus group interview. The focus group interview lasted about 80 minutes (see Appendix D for the interview questions).

3.5.1.3 *Stimulated recall*

As valuable as they may be, post hoc interviews rely heavily on memory, and thus in an attempt to increase confidence in the themes emerged from participants' responses to dialogic CF obtained through simple interviews, one of introspective methods known as *stimulated recall* was carried out. Stimulated recall consists of the participant's retrospective verbal reports on their thoughts during a task completion or a participation in an activity (Gass & Mackey, 2000). The participant's recall of his or her thoughts are supported by the researcher, for example, by showing a video-recording of the participant during an activity. According to Gass and Mackey (2000, p.18), the advantage of stimulated recall over a post hoc interview is its recall accuracy aided by prompts.

I conducted stimulated recall once with each participant individually towards the end of data collection. During Phase 2, I chose a representative writing conference session to be used for stimulated recall, and asked the participants to spend extra time in the following week for stimulated recall in addition to our regular conference. During stimulated recall, I played some parts of the recording of the writing conference conducted in the previous week, and asked questions regarding the participant's thought processes. Prior to stimulated recall, I listened to the entire audio-recording of the writing conference, selected certain parts to listen with the participant, and prepared questions to ask after listening to the selected part of the recording as a

preparation. Stimulated recall lasted about 30 minutes for both participants. It was recorded and transcribed for analysis.

3.5.2 *Writing conferences*

I conducted one-on-one writing conferences with the duration of 40-60 minutes at 1- to 2-week intervals in my office. Tina and Felix participated in 15 conferences. All conferences were audio-recorded for analysis, and I also kept field notes soon after conferences were conducted. Both participants composed a new text for each conference for the purpose of participating in the research. In order to align with the Vygotsky's claim that "the ultimate test of a theory is to be found in the real world" (Lantolf & Poehner, 2014, p. 8), the present study was designed with high ecological validity in the sense that the participants' writing experiences in this study reflected the real context of feedback practice where L2 learners receive CF from their teacher in their writing on the topic of their choice. Bronfenbrenner, as quoted by an ecological linguist, van Lier (2004, p. 169), defined ecological validity as follows:

Ecological validity refers to the extent to which the environment experienced by the subjects in a scientific investigation has the properties it is supposed or assumed to have by the investigator (1979, p. 29).

Furthermore, Hyland (2010, p. 180) argues that research on CF in L2 writing needs to have high ecological validity in order to generate information that is useful for educators to understand their students and their L2 learning for the purpose of the improvement of pedagogy. Therefore, the participants had the liberty of choosing the topic of their writing that were relevant to their interests, and they were instructed to write in the typical writing condition (no strict time limit, with access to resources such as a dictionary). On average, Tina's writing was one page (font 12, double spaced) long, and Felix's, four to seven lines. Writings of both participants were

something like journal entries except for Felix's three writings which were personal letters addressed to his former Japanese teacher, and a cooking recipe. Writing topics as well as the writing conference timeline for Tina and Felix are summarized in Table 3.3 and Table 3.4 respectively. Participants were instructed to email their writings to me one day before the writing conference so that I could prepare for the conference by writing corrections as well as grammar explanations on the first draft as a note exclusively for myself. Though researchers in previous CF in L2 writing studies framed in SCT (Aljaafreh & Lantolf, 1994; Erlam et al., 2013; Nassaji & Swain, 2000) do not seem to have taken this preparatory step, some preparation were necessary to provide clear grammar explanations and CF on a wide variety of grammatical structures in a timely fashion which I learned in the pilot study.

Table 3.3 *Writing Topics and Time Line for Tina*

Date		Original Title & English Translation
Phase 1 – Fall 2014		
Wk 1	Recruitment Pre-participation interview	
Wk 2	Writing 1 (1 st draft & revision)	アグラに出会った日 'The Day I Met Agra'
Wk 3	Writing 2 (1 st draft & revision)	Paylessで働きたくない理由 'The Reason I Don't Want to Work at Payless'
Wk 4	Writing 3 (1 st draft & revision)	2014年9月22日 (月) 'Monday, September 22, 2014' (a journal entry)
Wk 5	Writing 4 (1 st draft & revision)	Paylessで働きたくない理由 Pt. 2 'The Reason I Don't Want to Work at Payless Pt.2'
Wk 7	Writing 5 (1 st draft & revision)	ボリウッド映画 'Bollywood Movies'
Wk 8	Writing 6 (1 st draft & revision)	アミール・カーン 'Amir Khan'
Wk 9	Writing 7 (1 st draft & revision)	「Happy New Year」の感想 'My Comments on the Movie Happy New Year'
Wk 10	Writing 8 (1 st draft & revision)	インドに行きたい 'I want to go to India'
Wk 11	Writing 9 (1 st draft & revision)	新しいバイト 'New Part-time Job'
Wk 12	Writing 10 (1 st draft & revision)	出会い系サイトの経験 'My Experience of On-line Dating Site'

	Post-participation Interview	
Phase 2 – Summer 2015		
Wk 1	Writing 11 (1 st draft & revision)	アフロ・ヘアー ‘Afro-hair’
Wk 2	Writing 12 (1 st draft & revision)	健康的な生活 ‘Healthy Life Style’
Wk 3	Writing 13 (1 st draft & revision)	RuPaul’s Drag Race
	Stimulated recall interview	
Wk 4	Writing 14 (1 st draft & revision)	健康的な生活 Pt.2 ‘Healthy Life style Pt. 2’
Wk 6	Writing 15 (1 st draft & revision)	JET プログラム ‘JET Program’
Wk7	Focus group interview	

Table 3.4 *Writing Topics and Time Line for Felix*

Date		Original Title & English Translation
Phase 1 – Fall 2014		
Wk 1	Recruitment Pre-participation interview	
Wk 2	Writing 1 (1 st draft & revision)	小さいみじかいものがたり ‘A Little Short Story’
Wk 3	Writing 2 (1 st draft & revision)	ランタンパレード ‘Lantern Parade’
Wk 4	Writing 3 (1 st draft & revision)	新しい自転車 ‘A New Bicycle’
Wk 5	Writing 4 (1 st draft & revision)	赤ちゃん ‘Baby’
Wk 7	Writing 5 (1 st draft & revision)	春のたび ‘A Spring Trip’
Wk 8	Writing 6 (1 st draft & revision)	早い修正 ‘Quick Repair’
Wk 9	Writing 7 (1 st draft & revision)	ヤフーのニュース ‘Yahoo News’
Wk 10	Writing 8 (1 st draft & revision)	誕生日 ‘Birthday’
Wk 11	Writing 9 (1 st draft & revision)	促進 ‘Promotion’
Wk 12	Post-participation Interview	

Phase 2 – Summer 2015		
Wk 1	Writing 10 (1 st draft & revision)	中国の冒険 ‘(My) Adventure in China’
Wk 2	Writing 11 (1 st draft & revision)	セリアル ‘Serial’
Wk 3	Writing 12 (1 st draft & revision) Focus group interview	レシピのエビEtouffee ‘A Recipe for Shrimp Etouffee’
Wk 6	Writing 13 (1 st draft & revision)	やまだ先生 ‘Professor Yamada’ (A letter to Prof. Yamada)
Wk 7	Writing 14 (1 st draft & revision) Stimulated recall interview	やまだ先生 (続き) ‘Professor Yamada’ (A letter to Prof. Yamada, continued)
Wk 9	Writing 15 (1 st draft & revision)	日本のバディ ‘A Japanese Buddy’

The writing conferences mainly followed the procedure developed by Aljaafreh and Lantolf (1994) and thus the oral CF I provided was a type of social mediation. In addition to feedback intended for error correction, I intentionally included positive comments about the content and grammar of the learner’s writing throughout the conference since, according to some SCT researchers (e.g., Lidz, 1991), effective scaffolding consists of affective factors such as a supportive atmosphere and the provision of praise in addition to mediation appropriate to the learner’s developmental level. According to Wells (1999) “Learning in the ZPD involves all aspects of the learner – acting, thinking and feeling” (P. 331). Similarly, Mahn (2008, p. 117) argues, citing Chaiklin’s work, that one’s ZPD can expand or narrow due to emotional factors (e.g., anxiety, confidence) and social factors (e.g., the way how one interacts with her teacher).

In addition to the consideration of inter-personal and affective factors, there are three modifications to the Aljaafreh and Lantolf’s (1994) writing conference procedures in the present study. First, the CF in this study was given in the participant’s L1, English for Felix, because Felix was not proficient enough to discuss Japanese grammar in Japanese. Moreover, the

learner's L1 can be an effective psychological tool that facilitates his L2 learning according to the claims of SCT (e.g., Anton & Di Camilla, 1998; Lantolf, 2000; Wells, 1998). Tina, on the other hand, was proficient enough to have discussion on Japanese grammar in Japanese and she expressed her preference to speak in Japanese during the conferences. Thus, we had dialogic interactions almost exclusively in Japanese. There were only a few occasions that we discussed Japanese grammar in English, and the use of English was initiated by me due to my own difficulties in explaining Japanese syntax, which I studied only in English in Canada. When Tina had difficulty understanding my explanations in Japanese, I asked if she wanted to continue speaking in Japanese. Tina never gave up on communicating in Japanese and we always managed to understand each other at the end. Second, notes were taken during each conference. I prepared a clean copy of the participants' first draft and both the participants and I wrote on it so that at the end of each conference the participants had a draft with written CF. I added the note-taking component to this study because the pilot study participant often had difficulty understanding my grammar corrections without visual support (i.e., corrections written on a draft). In addition, due to the complex nature of the corrections that occurred during the conferences, I found it most effective to write down the corrections. CF studies with L2 English learners often dealt with word-level or morphological errors (e.g., articles, verbal inflections), but errors encountered in this study often required complex corrections involving restructuring the entire sentence. The need to take notes expressed by the pilot study participant is consistent with the findings reported by Carnicelli (1980) who identified the lack of written corrections as one of the weaknesses of oral CF in writing. Therefore, I included note-taking as a part of the writing conference of the present study. Third, I added the requirement of revision as it has been reported in the field of L2 written CF to be a factor which makes CF in L2 writing more effective

(e.g., Burton, 2009; Chandler, 2003; Shintani et al., 2014), as discussed in the literature review section above. In addition, my pilot study participant confirmed the findings of previous revision studies that the revision process solidified his newly gained grammatical knowledge. Within a few days after each conference, participants revised their first draft using the notes taken during the conference and emailed it to me.

Each writing conference began with the participant reading his/her writing (unmarked 1st draft) alone silently while trying to make error corrections if possible (Explicitness level 0 on the Regulatory Scale). I then provided my response regarding the content of the composition by expressing interest in the topic, and also by providing praise on the content as well as vocabulary and grammar. After that, I looked at the writing with the participant in order to establish myself as a dialogic partner (Explicitness level 1). Then I had the participant read the writing aloud one sentence at a time (Explicitness level 2). If the participant did not catch his/her grammatical errors after reading the sentence aloud, I mentioned the existence of grammatical errors in the sentence (Explicitness level 3). Depending on the response from the learner, I continued to make my scaffolding more explicit following the Regulatory Scale. During this process, I consulted my notes (written CF exclusively for myself on the first draft) so that I would not overlook the learner's errors as well as to guide my grammar explanations. After the participant successfully self-corrected his/her errors, I asked him/her to write down the correction directly on the copy of his/her writing. When I provided the correction, I wrote it down. At the end of the writing conference, the participant had a copy of his/her writing with written CF which we created together. After each conference, participants used the copy of the first draft with notes from the writing conference to revise. They emailed the revised version of the writing to me before they

wrote on a new topic, usually within a few days. Features related to the writing task and CF of this study are summarized in Table 3.5.

Table 3.5 *Writing Task and Feedback Design Features*
(adapted from Liu & Brown, 2015, p. 73)

Features	
Context	University, Foreign Language (Japanese)
Number of writings	15 per participant
Genre	Personal, journal
Location of Writing	At home
Time Limit	Untimed
Revision	Required within a week after a conference
Time between writings	1-2 weeks
Feedback turnaround time	1-2 days
Feedback type	Dialogic CF in Writing Conferences
Outcome measures	<ul style="list-style-type: none"> a) Error measure – correct instances/obligatory context (Quantitative analysis) b) Genetic method – changes in the learner responsiveness and reciprocity (Qualitative analysis)

All writing conferences were audio-recorded for analysis. I also took field notes after most of the writing conferences within the same day as a part of the data-gathering process (see Appendix E for sample field notes). Patton (2002) argues that the taking of field notes is a fundamental work in qualitative designs. Field notes, according to Patton (2002, pp. 303-304), contain: (a) the descriptive information which the researcher obtained from observation; (b) quotations from the participants, the researcher's feelings, reactions, and reflections on what has been observed; and (c) the researcher's insights, interpretations, and beginning analyses of what

has been observed. In my field notes, I recorded what I found as noteworthy including grammatical errors encountered in the conference, unexpected responses from the participants, and so on. I occasionally recorded direct quotations of participants because they sometimes said interesting things after I stopped recording when we were just chatting to conclude our meeting. Also, I recorded my reflections and feelings about what had just happened in the writing conference, which allowed me to begin the analysis and develop preliminary coding. A sample of my field notes can be found in Appendix E.

3.5.3 Data sources

Data of this study consists of audio-recordings and written documents. Every oral data source (interviews, stimulated recall, writing conference sessions) was audio-recorded. Written documents used as data sources include: (a) participants' first drafts (n = 15); (b) written CF on the first draft of every writing which I prepared exclusively for myself; (c) written CF on the first draft of every writing which the participant and I created together during the writing conference; (d) revision of every writing; (e) field notes; (f) transcripts of all interviews and stimulated recall; and (g) selective transcripts (corrective feedback episodes of target structures) of writing conference sessions.

3.6 Data analysis

The present study sought to examine the effectiveness and impact of Vygotskian dialogic CF on L2 writing holistically by using different types of qualitative and quantitative analyses which were linked as a whole using a case study approach. These analyses include: (1) a qualitative and quantitative analysis of grammatical errors on student compositions which were organized in an error log for each participant; (2) a distributional analysis (cf. Hakuta, 1996) of the target structures (three grammatical structures which appeared most frequently in the error

log) using all writings; (3) an in-depth qualitative analysis of the teacher-student dyads from the writing conferences focusing on the target structures by employing Vygotsky's genetic method; and (4) a thematic content analysis of the interview transcripts for the purpose of identifying emerging themes with respect to the participants' response to dialogic CF and their perception of language learning through dialogic CF. These four types of analyses were then linked using a case study approach in which the unit of analysis is the case (i.e., each learner). Table 3.6 shows how the data I analyzed addressed each research question.

Table 3.6 *Summary of Data Types for Each Research Question*

Research Questions	Types of Data
Q1. How do elementary and intermediate level English-speaking learners of Japanese as a foreign language (JFL) respond to dialogic CF with respect to use of Japanese grammatical structures?	<ol style="list-style-type: none"> 1) Written documents – writing samples 2) Audio-recordings of writing conferences
Q2. How do elementary and intermediate level English-speaking JFL learners respond to dialogic CF with respect to inter- and intrapersonal issues such as affect-emotion and learner agency?	<ol style="list-style-type: none"> 1) Audio-recordings of writing conferences 2) Semi-structured interviews 3) A focus group interview 4) A stimulated recall interview 5) Field notes
Q3. How do elementary and intermediate level English-speaking JFL learners perceive their own language learning through dialogic CF in their writing?	<ol style="list-style-type: none"> 1) Audio-recordings of writing conferences 2) Semi-structured interviews 3) A focus group interview 4) A stimulated recall interview 5) Field notes

3.6.1 *Evidence in writing*

In order to analyze evidence of the effectiveness of dialogic CF in writing (i.e., grammatical accuracy improvement in subsequent writings), I looked at changes in the product

of learning in the learners' new drafts. To do so, I first tallied the participants' grammatical errors from each writing in an error log. After that, I grouped errors in categories (e.g., Case particles). One error log was created for each participant. Using these two error logs which showed number of occurrences of every error types from every writing, I identified error categories that were in common with both learners. Then from the common error categories, I chose three categories that occurred most frequently as the target structures for analysis. After identifying three target structures, I performed distributional analysis, which is a method of descriptive linguistics, used in oft-cited Hakuta's (1976) seminal case study which characterized the nature of L2 learning process of a Japanese child in an ESL context. Following Hakuta's (1976) method of analysis, I calculated the proportion of correct instances of each target structure over total instances of the structure (which I refer to as accuracy rate) for each writing to show the full pattern of the accuracy development of each target structure. Though evidence obtained through distributional analysis cannot establish a causal relationship between CF and accuracy improvement, it serves as a basis of induction as it shows how the structure in question is distributed in the data, which may be difficult to infer from data obtained through pretest-posttest experimental design research. As Hakuta (1976) puts it, "from the single simple occurrence of a certain construction one can never infer much about the grammatical and semantic knowledge underlying its occurrence" (pp. 322-323).

Hence, the aim of my error analysis is to describe characteristics or pattern (e.g., linear, non-linear, gradual, sudden, etc.) of L2 development evidenced in new pieces of writing which can serve as a basis of induction for future investigation of effectiveness of CF in L2 writing. It has been a prevalent assumption among CF in L2 writing researchers (e.g., Truscott & Hsu, 2008) that the lack of accuracy improvement in new pieces of writing after a treatment of CF is

evidence of inefficiency of CF in L2 writing. It is my hope that the results of this study, which describes L2 developmental pattern, serves as a basis of induction to determine if such assumption is reasonable based on the nature of a developmental pattern observed in writing.

The three error categories chosen for this study include: (1) Case particles (the Topic *wa*, the Nominative *ga*, the Accusative *o*, the Genitive *ni*); (2) prenominal modification with *no*; and (3) copula overuse in Adjectival predicate. The first two error types are known as errors L2 learners as well as child L1 Japanese learners make frequently (cf. Iwasakai, 2006). For the purpose of this study, a particular Case particle error is defined based on what the correct particle should be in a given context. For example, if a learner used the Nominative *ga* when the correct particle should be the Accusative *o*, it would be considered as an instance of *o* error.

3.6.2 Evidence in interaction

After completing distributional analysis, I conducted microgenetic analysis (within a conference) and macrogenetic analysis (across conferences) of the genetic method in search of evidence of L2 development in interaction. Sociocultural theory asserts, as explained by Lantolf (2012, p. 60), “development is not only about improvements in performance but also about control over the performance.” Thus, “shifts in the quality and quantity of negotiated mediation” (Lantolf, 2012, p. 60) are understood as indications of development. To analyze the learner’s control over the performance (which is also understood as the learner’s assisted performance), Vygotsky proposed a new research method called genetic method consisting of macrogenetic analysis (across sessions) and microgenetic analysis (within a session). Genetic method allows one to trace formation of cognitive abilities (e.g., L2 grammatical competence) of a learner in socially mediated contexts. Previous CF in L2 writing studies that drew on the sociocultural construct (Nassaji & Swain, 2000; Erlam et al. 2013) described changes in the quality of the

expert's help (in assisting the learner's self-correction of grammatical errors in his/her writing) numerically by utilizing Aljaafreh and Lantolf's (1994) regulatory scale. The present study used the above mentioned two studies as a model and assigned a numerical value to each corrective feedback episode with the following procedure. First, on a clean first draft of the participants' writing, Case particle errors were highlighted. Case particle errors were chosen for analysis because it was the most frequent error category. Second, using the highlighted drafts, corrective feedback episodes were identified in the recordings of the writing conferences. Third, corrective feedback episodes were transcribed. Forth, on the transcriptions of the corrective feedback episodes, a numerical value, ranging from 0 (implicit) to 12 (explicit), was assigned to each corrective feedback episode. Numbers from 0 to 9 indicate the learner's successful self-correction, and 10 and above indicate that the researcher provided the correct form. In addition, in some instances, I assigned two numerical values connected by "&" (e.g., 8&12) when the learner was able to self-correct, but needed (or wanted) more explicit help (i.e., grammar explanation). The researcher provided grammar explanation after the learner's successful self-correction when the learner asked for the grammar explanation or they commented that they did not understand why the Case particle they chose as a correction should be used. This kind of feedback episodes was not reported in the previous CF in L2 writing studies (e.g., Aljaafreh & Lantolf, 1994; Nassaji & Swain, 2000). Perhaps it is related to the particular Japanese grammatical feature (i.e., Case particles) examined in the present study.

The way how I assigned a numerical value to each corrective feedback episode is illustrated below. The episode comes from Felix's 1st writing conference. T stands for the teacher/researcher, and S, student (in this case Felix). In the example below, Felix successfully corrected his error after the teacher/researcher narrowed down the location of error for him

(regulatory scale level 5), and therefore a numerical value of 5 was assigned to this episode. T stands for teacher/researcher, and S, student. T starts providing help with a rather implicit comment (line 1). After rejecting unsuccessful attempts at recognizing the error (lines 2 – 5), and also after S's response in line 6 (*Really?*) that indicates S's need for a more explicit help, T provides more explicit help (regulatory scale level 5) by narrowing down the error in line 7. Since level 5 was the last help needed before S's successful error correction, the numerical value of 5 was assigned to this episode.

Corrective Feedback Episode (Felix: Conference 1)

1. T: Let's look at this phrase up until here. There is one grammatical error. [**T indicates something is wrong**]
 2. S: *Syoogo goro.... Goro* is correct?
 3. T: *Goro* is correct. [**T rejects unsuccessful attempts recognizing the error**]
 4. S: Is *no ato ni* correct?
 5. T: That's correct. [**T rejects unsuccessful attempts recognizing the error**]
 6. S: *Hontoo ni* ('Really')?
 7. T: There is something wrong with *atui ni narimasita*. [**T narrows down the location of error**]
- Regulatory Scale Level 5
8. S: Do you not use *ni*? Oh, wait.... *atuku*? [**S's successful error correction**]
 9. T: Exactly. Yeah! *Atuku*.

3.6.3 Content analysis of interview evidence

In order to answer the second and the third research questions regarding learner affect and perception of learning, I conducted qualitative thematic content analysis (Patton, 2002, p.453) in search of recurring themes that relate to learner affect as well as learner perception of

language learning. Although content analysis is typically considered a quantitative analysis technique because it involves counting (Burns & Grove, 2005), Berg (2009) argues that it can be an effective qualitative analysis technique. According to Berg (2009, p. 343), content analysis method of 'counts' or coding can be an effective means of identifying and organizing data for data interpretations. For the purpose of ensuring systematicity, I used the stages in the content analysis process proposed by Berg (2009, P. 362) as a guide for my qualitative analysis. While the main data source was interview transcripts (individual, stimulated recall, focus group), field notes and audio-recorded writing conference sessions were also used to confirm the themes that emerged from interview data.

I chose 'theme' as a unit of analysis for coding which is either a sentence or a phrase. In my analysis, I employed a combination of deductive and inductive approach referred to as analytic induction (Berg, 2008, p. 358). Since the present dissertation is grounded in sociocultural theory, I found deductive approach, in which a researcher create a set of codes (or themes) derived from a theory prior to coding, appropriate. I also wanted to allow new themes to emerge from the data I collected, and thus inductive approach was used as well. Berg (2008, 359) urges researchers to make use of analytic induction, citing Strauss (1987, p. 12) who claims that three modes of inquiry (induction, deduction, and verification) are essential in qualitative research. Furthermore, I attempted to provide understanding of 'lived experience' of the participants through 'thick description' which Denzin (1978) defines as "description that goes beyond the mere or bare reporting of an act (thin description), but describes and probes the intentions, motives, meanings, contexts, situations and circumstances of action" (p. 39).

A qualitative analysis software called NVivo was used to organize and analyze data thoroughly and vigorously in a transparent way. I took the following steps to conduct my

qualitative content analysis. First, before I began coding, I created some codes and summarized the coding scheme in a codebook (Patton, 2002, p.464). Some of the coding derived from sociocultural theory, and others emerged from my field notes which recorded my reflection immediately after writing conferences. Also, I continued to develop the codebook by adding new codes when they emerged from the data during the second step described below. The codebook appears in Appendix F. Second, I read through the interview transcripts line-by-line. When I found themes that fit to one of the existing codes, I assigned it. In addition, I developed a rudimentary coding scheme through “open coding” (Strauss & Corbin, 1998, p. 101) in an attempt to figure out possible themes and possible meaning from data. That is, as I read and reread through my data, I identified information that is relevant to my research and gave it a tentative name (code). During open coding, I used the constant comparative method (Glaser & Strauss, 1967). As I created new codes, I went back to previously coded section, and constantly compared my new codes and existing codes in order to ensure consistency or to revise the previous codes. After open coding, I did “axial coding” (Strauss & Corbin, 1998, p. 123) by first identifying major codes and then relating subcodes to sort out what I have learned. Furthermore, in order to increase trustworthiness of my interpretation, a second coder coded 15% of the transcriptions using NVivo and 99.6% of inter-coder reliability was achieved. The second coder is a PhD student in Applied Linguistics with training in qualitative analysis and also well read in sociocultural theory. Prior to coding, I trained him by explaining my codes and their description using the codebook I developed. When coding was finished, I endeavored to interpret the data by the major themes which emerged from the process of coding. In addition, I considered how the major themes are connected. Finally, I condensed my qualitative analysis into a narrative that

addresses the research questions in terms of affective outcomes of dialogic CF and learners' perception of L2 learning through dialogic CF.

3.7 Conclusion

The overarching aim of the present study is to holistically study the efficacy of CF in L2 writing by taking into consideration learners' independent performance (i.e., accuracy improvement in new pieces of writings), learners' assisted performance (i.e., improvement in learners' responsiveness to dialogic CF), affective outcomes, and social factors associated with CF practice. The aim of the study calls for a case study approach which makes use of various data sources including written documents (original and revised drafts of compositions), audio-recordings of writing conferences, audio-recordings of interviews (individual, focus group, stimulated recall), and field notes. These data sources were analyzed with various data analysis methodologies. Changes in learners' independent performance (i.e., grammatical accuracy rate) were analyzed with distributional analysis. Changes in learners' assisted performance were analyzed with Vygotsky's genetic method. Following Aljaafreh and Lantolf's (1994) analysis, I qualitatively analyzed the learner-teacher dyads from writing conferences to document how the quality of teacher assistance and learner reciprocity changed. The changes of teacher mediation on the continuum of implicit to explicit were also documented quantitatively using Aljaafreh and Lantolf's (1994) regulatory scale following the analysis conducted by Nassaji and Swain (2000) and Erlam et al. (2013). Affective outcomes and social factors associated with the dialogic CF were analyzed qualitatively largely following the method used in content analysis using interview data.

In the next two chapters, I will present findings and discussion of these findings. Chapter 4 addresses research question 1 in terms of linguistic outcomes of dialogic CF. Chapter 5 addresses research questions 2 and 3 regarding affective outcomes of dialogic CF.

4 FINDINGS AND DISCUSSION: LINGUISTIC OUTCOMES

This chapter addresses research question 1 (repeated below) by exploring the two JFL learners' response to dialogic CF with respect to use of Japanese grammatical structures.

Research question 1 concerns characterizing the nature of L2 learning process (e.g., linear, non-linear, gradual, abrupt, emergent, etc.) measured by the accuracy change.

1. How do elementary and intermediate level English-speaking learners of Japanese as a foreign language (JFL) respond to dialogic CF with respect to use of Japanese grammatical structures?

Throughout this chapter, I will be interspersing findings and discussion. In section 4.1, findings regarding evidence of learning in new pieces of writing are reported and discussed. In section 4.2, results of micro- and macro-genetic analyses with respect to evidence of L2 learning/development manifested in interaction are reported and discussed. Lastly, Section 4.3 concludes this chapter by summarizing main findings and their significance.

4.1 Evidence of learning in writing

In order to analyze how two JFL learners responded to dialogic CF with respect to use of grammatical structures (i.e., grammatical accuracy improvement in subsequent writings), I examined changes in the product of learning in the learners' new drafts. To do so, as explained in the previous chapter, I employed distributional analysis (Hakuta, 1976) and calculated accuracy rate (i.e., the proportion of correct instances over total instances) of each target structure separately for the purpose of inducing the nature of L2 learning process. The three target structures chosen for this study are: (1) Case particles (the Topic *wa*, the Nominative *ga*, the Accusative *o*, the Genitive *ni*); (2) prenominal modification with *no*; and (3) copula overuse in

Adjectival predicate. Below, I first present results of all target structures combined followed by results of each target structure separately.

4.1.1 Overall accuracy rate

Figure 4.1 below shows accuracy rates of all the target structures combined for Tina and Felix. The profiles of Tina's and Felix's accuracy curves are similar by having two characteristics in common; (1) constant fluctuation, and (2) gradual stabilization at higher accuracy rate. That is, along the accuracy curve, we do not find upwardly linear improvement of accuracy. Thus, by comparing the accuracy rates of two or three writings in succession, it is not clear whether the participants gained better control of the Case particles while they received dialogic CF. However, from the full pattern of a collection of 15 writing samples, we can see a trend of accuracy rate stabilization at closer to 100% towards the end. In other words, accuracy rates continuously fluctuated from the beginning till the end of data collection period, but as the participants received more dialogic CF, their regression became less acute. Tina's accuracy rates initially fluctuated between 81% and 96 %, but stabilized at above 88% from Writing 10. Felix's accuracy rates fluctuated between 57% and 84% initially, but stabilized at around 90% from Writing 5, and from Writing 12, his accuracy rates reached near 100% except for Writing 14.

Two characteristics of the process of L2 learning found in this study have two important research implications in interpreting the results of studies investigating the efficacy of CF in L2 writing. First, the vast majority of previous studies are short term studies comparing the accuracy change of a few writing samples. However, the findings of this study suggest inadequacy of short-term studies for understanding the complexity of L2 learning through CF in writing. As shown in Figure 4.1, L2 development is slow and gradual, and thus one can observe the pattern of progress only by looking at the longitudinal data with multiple writing samples. Second, the

constant fluctuation of accuracy rate reported in this study suggests reconsideration of data interpretation of previous CF studies in L2 writing. The prevalent assumption of the field is that the lack of accuracy improvement in the subsequent writing samples after receiving CF is evidence of inefficacy of CF (e.g., Truscott & Hsu, 2008). However, the findings of the present study suggest that a short-term regression of accuracy rate does not necessarily mean the lack of L2 learning or inefficacy of CF in writing in light of the nature of the process of L2 learning consisting of constant accuracy fluctuation.

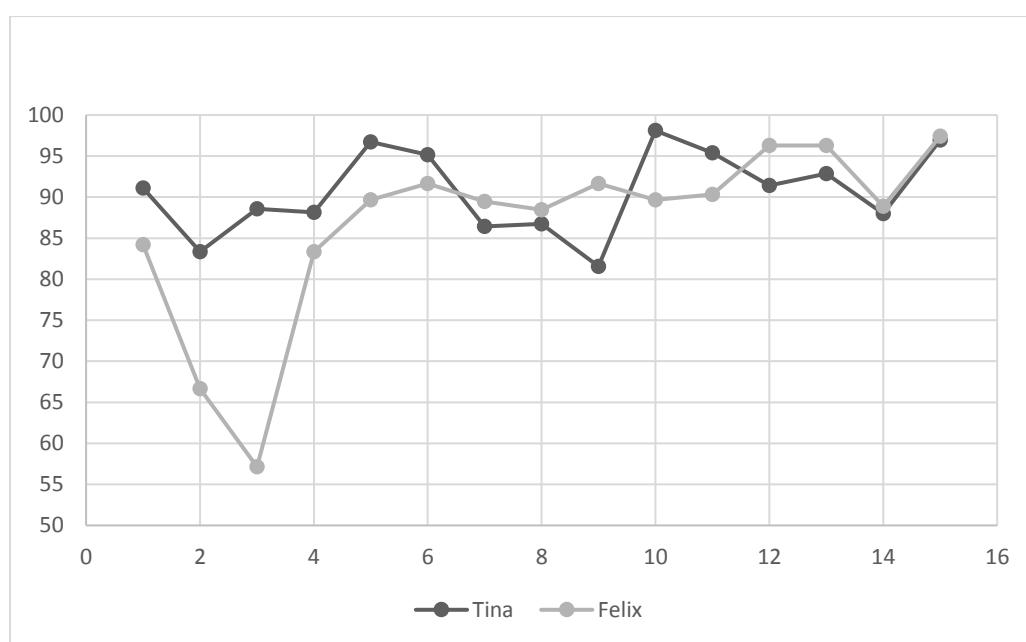


Figure 4.1 Accuracy rates (proportion of correct instances over total instances) for all target structures combined for Tina and Felix

Furthermore, two characteristics of L2 learning process found in this study are consistent with findings of Hakuta's (1976) case study which described the nature of acquisition process of L2 English using a longitudinal naturalistic spoken data of a Japanese child ESL learner. In particular, the profiles of the curves shown in Figure 1 are strikingly similar to the profile of the two acquisition curves of English definite and indefinite articles in Hakuta's (1976, p.339) study

in terms of constant accuracy rate fluctuation and the gradual stabilization approaching 100%. The similarities between the results of this study and that of Hakuta's (1976) suggest that findings of these case studies are not idiosyncratic and have utility beyond the cases studied. Furthermore, that the research finding of the present study hold over variations in learners, target languages, and settings permits naturalistic generalization, "arrived at by recognizing the similarities of objects and issues in and out of context and by sensing the natural covariations of happenings" (Stake, 1978, p. 6), of the nature of the L2 learning process. As Guba (1978, p. 70) emphasized, conclusions from naturalistic inquiry or naturalistic generalization are not definitive and should be regarded as working hypotheses. It is hoped that the characteristics of the nature of the L2 learning process found in the present study be tested in future studies to further our understandings of the complexity of L2 learning in general and L2 learning through CF in writing in particular.

4.1.2 Case particle errors

As the majority of errors are Case particle errors, the overall accuracy rate curve shown above and Case particle accuracy curve shown in Figure 4.2 look very similar with constant fluctuation leading to gradual stabilization approaching 100% level. Thus, only by examining the full pattern of accuracy curve, one can infer the impact of dialogic CF on L2 learning. For example, if we only look at the accuracy rates of Writing 1, 2, and 3, it appears that dialogic CF had negative effect on accuracy for both participants. Felix's accuracy rate continuously declines, and Tina's accuracy rate drops sharply in Writing 2 followed by a modest improvement in Writing 3. However, looking at the trend of accuracy change over 15 writing samples, we can see that the accuracy rate of both learners stabilize at closer to 100% towards the end. Felix's accuracy rates in Writing 1- 3 are above 66%; in Writing 4 -11, above 84%; and in Writing 12-

15, above 90%. Tina's accuracy rates fluctuate between 74% and 95% in Writing 1 -9, and from Writing 10, her accuracy rates are consistently above 87%.

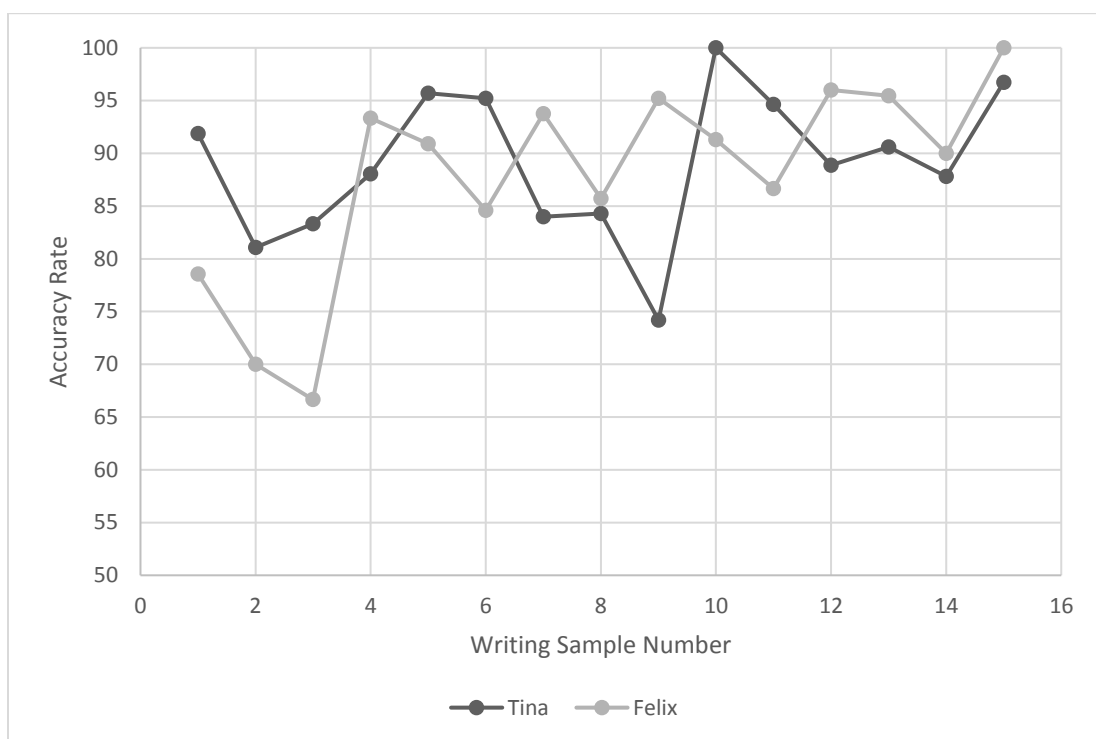


Figure 4.2 Accuracy rates (proportion of correct instances over total instances) for the Case particles (*wa*, *ga*, *o*, *ni*)

4.1.3 Prenominal modification with *-no* errors

A Japanese noun can be used to modify a following noun when a particle *no* is attached to the first noun as in [Noun-*no* Noun]. L2 Japanese learners have been reported to overgeneralize this grammar (Iwasaki, 2006) and use this structure with an adjective or a verb plus *-no* to modify the following noun, which is ungrammatical as both adjectives and verbs modify the following noun without any use of a particle.

Figures 4.3 and 4.4 show the accuracy rates for Tina and Felix separately for visual clarity. Tina's accuracy curve of prenominal modification shows lesser degree of fluctuation than that of Case particles, suggesting that Tina was already near mastery of this structure at the

beginning of the data collection. It appears that after she received CF on her first writing, she gained complete control over this structure. However, the accuracy rates begin to fluctuate starting from Writing 8 though her accuracy rates remained relatively high throughout the data collection period.

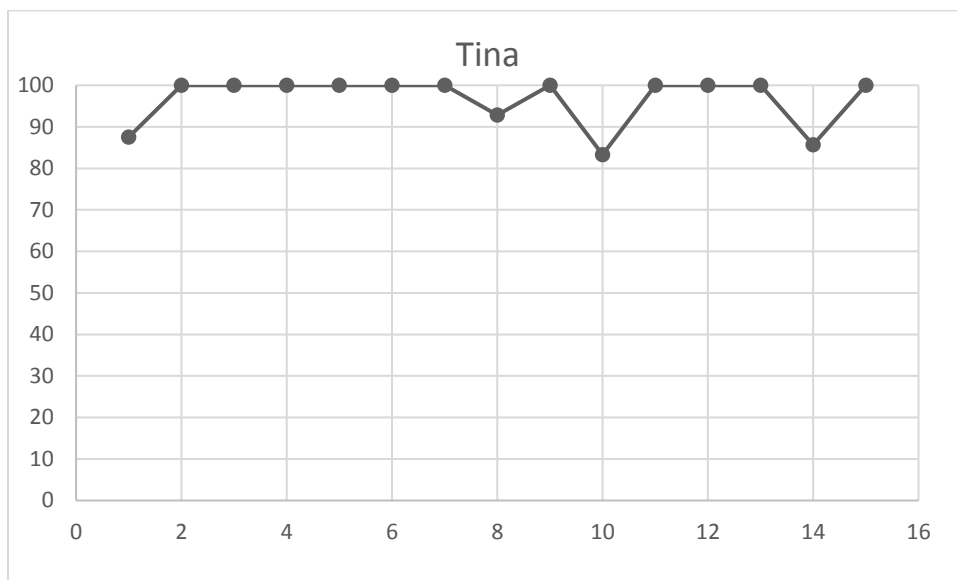


Figure 4.3 Accuracy rates (proportion of correct instances over total instances) for prenominal modification for Tina

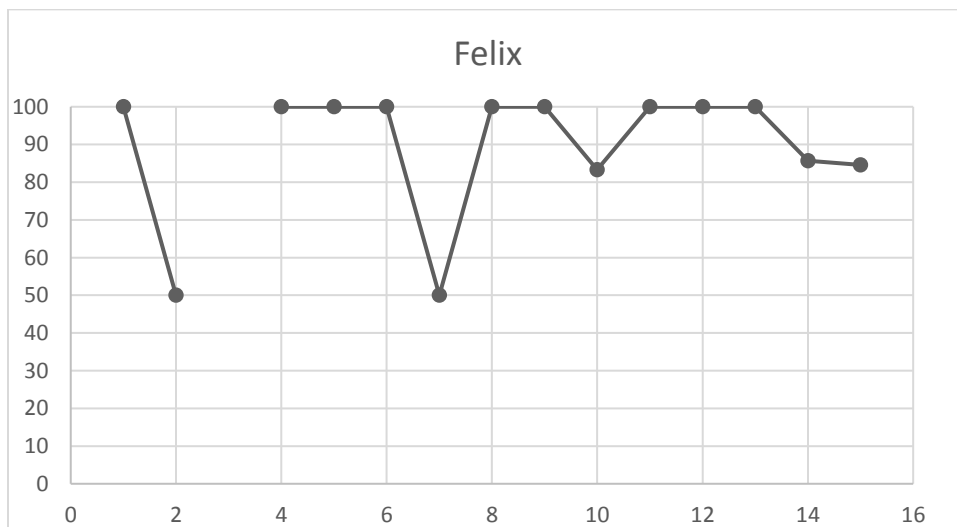


Figure 4.4 Accuracy rates (proportion of correct instances over total instances) for prenominal modification for Felix

Felix's accuracy rates show greater fluctuation than Tina's. Also, the range of accuracy rates is wider than that observed in Case particles. However, the profile of the accuracy curve of prenominal modification is similar to that of Case particles with constant fluctuation leading to gradual stabilization near 100%.

4.1.4 Copula overuse in adjectival predicates

Japanese adjectives have inflections, just like verbs, and thus are used without a copula *da* (imperfective) or *data* (perfective) in an adjectival predicate. I refer to an instance of an adjective followed by a copula *da/data* in an adjectival predicate as copula overuse.

Tina's accuracy curve is shown in Figure 4.5 and Felix's in Figure 4.6. Although disconnected plot lines (due to the absence of the structure in certain writings) make it somewhat difficult to interpret the data, we can see that the profiles of these two curves are similar to the curves presented above with fluctuation leading to gradual stabilization near 100%.

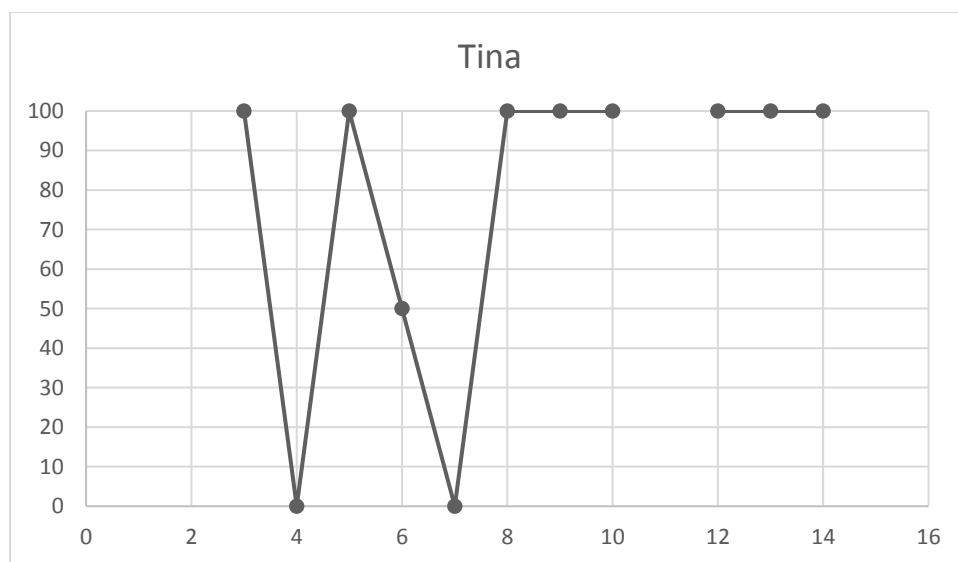


Figure 4.5 Accuracy rates (proportion of correct instances over total instances) for adjectival predicate for Tina

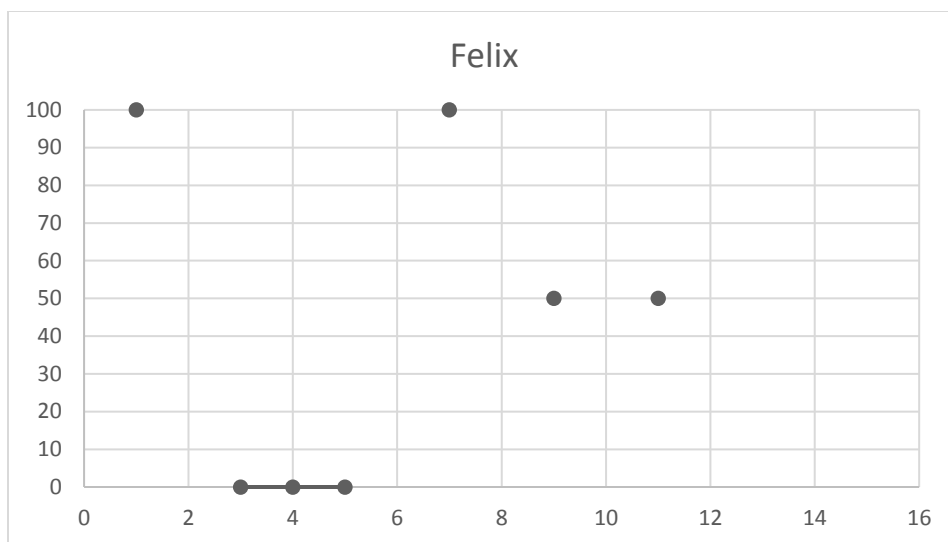


Figure 4.6 Accuracy rates (proportion of correct instances over total instances) for adjectival predicate for Felix

4.2 Evidence of learning in interactions: Genetic method results

In this section, I report the results of genetic method, a qualitative analysis of CF episodes which traced the changes in the quality of teacher's help required by the learner for his/her self-correction of three target structures. Analysis with genetic method was conducted to complement the analysis of accuracy rates reported above so that we can compare the learner's L2 development (or the lack thereof) in writing and in interaction, which may further our understanding of the complexity of L2 learning through CF in writing.

The results of genetic method for Tina and Felix are summarized below in Table 4.1 and 4.2 respectively. In these tables, accuracy rates are also presented to allow a comparison between the learner's independent performance in writing and assisted performance during dialogic CF. For each error, the teacher/researcher provided dialogic CF (corrective feedback episode) to assist the learner's self-error correction, and a numerical value was assigned to each corrective feedback episode using regulatory scale (Aljaafreh & Lantolf, 1994), ranging from 0 (implicit) to

12 (explicit) to indicate the quality of help provided by the teacher/researcher. Number 9 and below indicates the learner's successful self-correction. Number 10 and above indicates that the learner could not self-correct and the correct form was provided by the researcher/teacher. In the instance when the learner needed or requested an explanation after his/her successful error correction, both numbers are reported (e.g., 3& 11). The order in which a given feedback episode took place is indicated by circled numbers (e.g., ①, ②, etc.). Changes in the quality of help, from more explicit to less explicit, is understood as evidence of development in SCT. More explicit help is associated with other-regulation and less explicit help with self-regulation. Thus, in the 'level of help' column of the tables below, decrease of number suggests the learner's progress towards self-regulation, hence L2 development.

Table 4.1 Accuracy Rate and Genetic Method Results for Tina

ErrorType	-wa error	-ga error	-o error	-ni error	Total Accuracy Score # Crrct / # Total Instances	Level of help (in the order provided)
Erroneous Forms Examples	*-ga *-mo *-ni *-de	*-wa *-ni *-o	*-ni *-wa *-demo	* other prtcls *-ni + copula		
Writing 1	* → 0 ✓ → 9	* → 0 ✓ → 4	* → 1 ✓ → 7	* → 2 ✓ → 14	34/37 (91.89%)	3&11, 3&12, 11
Reg Scale			①3&11	②3&12③11		
Writing 2	* → 2 ✓ → 12	* → 2 ✓ → 4	* → 2 ✓ → 4	* → 1 ✓ → 10	30/37 (81.08%)	6&12, 4&11, 3, 11, 3&11, 5&11, 3&11
Reg Scale	①6&12 ⑤3&11	④11⑦3&11	②4&11③3	⑥3&11		
Writing 3	* → 1 ✓ → 5	* → 1 ✓ → 2	* → 1 ✓ → 5	* → 1 ✓ → 8	20/24 (83.33%)	12, 3, 4&11
Reg Scale	③4&11	①12	②3			
Writing 4	* → 0 ✓ → 15	* → 3 ✓ → 10	* → 0 ✓ → 14	* → 5 ✓ → 20	59/67 (88.05%)	10, 4&11, 6&11, 10, 3, 10, 11, 3
Reg Scale		②4&11 ③6&11⑦11		①11④10 ⑤3⑥10⑧3		

Writing 5	* → 0 ✓ → 17	* → 3 ✓ → 14	* → 0 ✓ → 9	* → 0 ✓ → 27	67/70 (95.71%)	6
Reg Scale		①N/A ②N/A③6				
Writing 6	* → 0 ✓ → 13	* → 2 ✓ → 8	* → 0 ✓ → 6	* → 0 ✓ → 13	40/42 (95.23%)	6&11, 9
Reg Scale		①6&11②9				
Writing 7	* → 3 ✓ → 12	* → 1 ✓ → 11	* → 1 ✓ → 4	* → 3 ✓ → 15	42/50 (84.00%)	4, 3, 6&12, 11, 12, 12, 10, 6&12
Reg Scale	③6&12④11 ⑤12	⑧6&12	⑦10	①4②3⑥12		
Writing 8	* → 1 ✓ → 11	* → 2 ✓ → 3	* → 1 ✓ → 7	* → 4 ✓ → 22	43/51 (84.31%)	3&11, 3&11, 3&11, 4&11, 12, 11, 11
Reg Scale	⑦11	②3&11⑤12	⑧11	①3&11 ③3&11 ④3&11⑥11		
Writing 9	* → 1 ✓ → 8	* → 0 ✓ → 6	* → 3 ✓ → 4	* → 4 ✓ → 5	23/31 (74.19%)	5&12, 11, 9, 10, 10, 10, 3, 11
Reg Scale	⑥10		③9 ⑦3⑧11	①5&12②11 ④10⑤10		
Writing 10	* → 0 ✓ → 7	* → 0 ✓ → 11	* → 0 ✓ → 11	* → 0 ✓ → 15	44/44 (100%)	
Reg Scale						
Writing 11	* → 0 ✓ → 4	* → 0 ✓ → 6	* → 0 ✓ → 21	* → 3 ✓ → 22	53/56 (94.64%)	12, 3, 6
Reg Scale		①3	②11			
Writing 12	* → 2 ✓ → 12	* → 1 ✓ → 6	* → 0 ✓ → 15	* → 3 ✓ → 15	48/54 (88.88%)	7, 7, 12, 11, 7, 12
Reg Scale	①7 ③12	④11		②7⑤7⑥12		
Writing 13	* → 2 ✓ → 15	* → 0 ✓ → 3	* → 0 ✓ → 5	* → 1 ✓ → 6	29/32 (90.62%)	3&11, 11, 10
Reg Scale	①3&11②11			③10		
Writing 14	* → 0 ✓ → 9	* → 1 ✓ → 5	* → 0 ✓ → 11	* → 4 ✓ → 11	36/41 (87.80%)	3&12, 3, 4&11, 2, 11
Reg Scale		①3&12		②3 ③4&11 ④2 ⑤11		
Writing 15	* → 0 ✓ → 8	* → 0 ✓ → 6	* → 1 ✓ → 19	* → 1 ✓ → 26	59/61 (96.72%)	10, 10
Reg Scale			②10	4 10		

Table 4.2 Accuracy Rate and Genetic Method Results for Felix

Error Type	-wa error	-ga error	-o error	-ni error	Total Accuracy Score # Crct / # Total Instances	Level of help (in the order provided)
Erroneous Forms Examples	*-ga	*-wa *-o	*V + o *Adj + o	*V + ni *Adj + ni Other		
Writing 1	* → 0 ✓ → 3	* → 1 ✓ → 2		* → 2 ✓ → 6	11/14 (78.57%)	12,5,3
Reg Scale		③3		①12 ②5		
Writing 2	* → 0 ✓ → 3	* → 1 ✓ → 1	* → 1 ✓ → 3	* → 4 ✓ → 7	14/20 (70%)	7&11, 11, 11, 11, 11, 12
Reg Scale		①7&11	⑤11	②11 ③11 ④11 ⑥12		
Writing 3		* → 1 ✓ → 3	* → 3 ✓ → 3	* → 0 ✓ → 2	8/12 (66.66%)	11, 9&11, 9, 7&11
Reg Scale		④7&11	①11②9&11 ③9			
Writing 4	* → 0 ✓ → 4	* → 0 ✓ → 4	* → 1 ✓ → 3	* → 0 ✓ → 3	14/15 (93.33%)	11
Reg Scale			①11			
Writing 5	* → 0 ✓ → 3	* → 1 ✓ → 5		* → 1 ✓ → 12	20/22 (90.90%)	7&11, 10
Reg Scale		①7&11		②10		
Writing 6		* → 0 ✓ → 4	* → 1 ✓ → 5	* → 1 ✓ → 2	11/13 (84.60%)	11, 9
Reg Scale			②9	①11		
Writing 7	* → 1 ✓ → 2	* → 0 ✓ → 4	* → 0 ✓ → 5	* → 0 ✓ → 4	15/16 (93.75%)	11
Reg Scale	①11					
Writing 8	* → 1 ✓ → 5	* → 0 ✓ → 4	* → 1 ✓ → 4	* → 1 ✓ → 5	18/21 (85.71%)	6, 9&11, 10
Reg Scale	①6		②9&11	③10		
Writing 9	* → 0 ✓ → 7	* → 0 ✓ → 6	* → 1 ✓ → 2	* → 0 ✓ → 5	20/21 (95.23%)	9
Reg Scale			①9			

Writing 10	* → 0 ✓ → 4	* → 0 ✓ → 4	* → 1 ✓ → 2	* → 1 ✓ → 11	21/23 (91.30%)	10, 3
Reg Scale			①10	② 3		
Writing 11	* → 0 ✓ → 5	* → 1 ✓ → 1	* → 1 ✓ → 3	* → 0 ✓ → 4	13/15 (86.67)	3, 11
Reg Scale		①3	②11			
Writing 12		* → 0 ✓ → 2	* → 0 ✓ → 14	* → 1 ✓ → 8	24/25 (96.00%)	11
Reg Scale				① 11		
Writing 13	* → 0 ✓ → 5	* → 1 ✓ → 5	* → 0 ✓ → 5	* → 0 ✓ → 6	21/22 (95.45%)	10
Reg Scale		①10				
Writing 14	* → 2 ✓ → 4	* → 0 ✓ → 4	* → 0 ✓ → 5	* → 0 ✓ → 5	18/20 (90.00%)	10, 9
Reg Scale	①10 ②9					
Writing 15	* → 0 ✓ → 8	* → 0 ✓ → 2	* → 0 ✓ → 5	* → 0 ✓ → 12	27/27 (100%)	
Reg Scale						

4.2.1 Macrogenetic analysis (across writing conferences)

Tina. During most of the corrective feedback episodes, Tina needed to hear metalinguistic explanations (Level 11 or above) except for the 5th, 10th (no errors), and 15th conference. Thus, from macrogenetic analysis alone, one cannot see a clear pattern of progression or regression towards L2 development or self-regulation. Also, a phenomenon not reported in previous CF studies framed in SCT (Aljaafreh & Lantolf, 1994; Erlam et al, 2013; Nassaji & Swain, 2000) emerged. That is, a combination of successful self-correction followed by a request for grammar explanation. Tina often requested grammar explanations after successful error correction because, on her account, she did not understand why the Case particle she chose as correction was the correct particle.

Felix. Similar to Tina, in self-correcting his grammatical errors, Felix needed metalinguistic explanations (Level 11 or above) in most of the conferences. Also, Felix sometimes asked for explanations after his successful self-error correction. From the 1st to the 12th conference, there is no clear sign of development in terms of the changes in the quality of help required by Felix. However, from the 13th writing conference, his L2 development suddenly becomes apparent in a sense that he no longer needed to hear metalinguistic explanations from the researcher/teacher, and he achieved 100% accuracy in writing 15.

Vygotsky (1978) posits that development results from ‘spasmodic and revolutionary changes,’ rejecting the commonly held view of cognitive development as ‘the gradual accumulation of separate changes’ (p. 73). The results of macrogenetic analysis above are consistent with sociocultural understanding of developmental process as ‘spasmodic’ changes. We did not see gradual change in the quality of help required by the learners. Instead, both learners needed quite explicit help most of the time and without going through a phase of needing implicit help, their L2 Japanese grammar appears to have developed as shown by the distributional analysis in section 4.1.

4.2.2 Microgenetic analysis (within a writing conference)

Tina. Most of Tina’s data revealed a non-linear pattern in which the level of help she required from the teacher/researcher fluctuated (1st, 2nd, 3rd, 4th, 7th, 8th, 9th, 11th, 12th, and 14th conference). Progress was observed only in two conferences (6th and 13th conference). However, there are more instances of clear progress when looking only at an error type. For example, in the 2nd conference, Tina needed gradually less explicit help each time she tried to self-correct *wa* errors, *ga* errors, and *o* errors.

Felix. The data shows progression in most of the conferences (1st, 5th, 6th, 10th, and 14th conference). The data also shows regressions (2nd and 11th conference) and non-linear patterns (3rd and 8th conference). Examining the data more closely by the error type (e.g., *wa* error), there are only progressions (*o* error in 3rd conference and *wa* error in 14th conference).

As discussed above, constant and upwardly linear progression is not expected from sociocultural perspectives. However, the presence of progressions, from other-regulation to self-regulation, in the data suggests that development took place during the dialogic interactions which in turn implies the likelihood that the participants' L2 development observed in this study is the result of the dialogic CF they received, although establishing the causal relationship between dialogic CF and accuracy improvement is outside of the scope of the present case study.

4.3 Summary

The data considered in this chapter reveal the L2 developmental pattern addressing research question 1: How do elementary and intermediate level English-speaking learners of Japanese as a foreign language (JFL) respond to dialogic CF with respect to use of Japanese grammatical structures.

From the analysis of the learners' independent performance in 4.1, we have seen that accuracy rates fluctuate. Thus, from the comparison of a few accuracy rates, we cannot see a pattern of progress or regression. However, by looking at the accuracy rate of 15 writings, we can see a trend that accuracy rates stabilize at near 100% at the end, suggesting that both learners L2 developed during the time they participated in the writing conferences in which they received dialogic CF.

Analysis of the learners' assisted performance also showed a non-linear pattern of L2 development. Macrogenetic analysis showed not much change across conferences; the learners

continued to require rather explicit help from the teacher/researcher during self-error correction throughout the data collection period. However, clear evidence of development (i.e., the explicitness of help required by the learner decreased each time s/he received help) was found when looking only at an error type within a conference (microgenetic analysis).

The overall findings are consistent with sociocultural conceptualization of development as spasmodic and revolutionary process. The contribution of the present study lies in the numerical presentation of the developmental pattern relevant to the field of CF in L2 writing. The majority of previous studies analyzed the efficacy of CF in L2 writing under the assumption that L2 development results from ‘the gradual accumulation of separate changes’ (Vygotsky, 1978, p. 73) and thus equated short-term accuracy change after the provision of CF with efficacy (e.g., Van Beuningen et al., 2012) or inefficacy of CF (e.g., Truscott & Hsu, 2008). However, the results of the present longitudinal study showed inadequacy of short-term studies in light of the complex nature of the process of L2 development.

In the next chapter, findings that address research question 2 regarding affective outcomes of dialogic CF, and research question 3 regarding the learner perception of language learning through dialogic CF are reported and discussed.

5 FINDINGS AND DISCUSSION: AFFECTIVE OUTCOMES

Previous chapter addressed linguistic outcomes of dialogic CF. This chapter, on the other hand, addresses affective outcomes of dialogic CF by reporting the results of a thematic content analysis of interview transcripts, including two individual interviews (one before the start of the study, and the other after one semester of participation), a stimulated recall interview, and a focus group interview. I endeavored to identify emerging themes with respect to (1) the participants' affective response to dialogic CF which addresses research question 2, and (2) participants' perception of language learning through dialogic CF which addresses research question 3 below. As was the case with the previous chapter, I will be interspersing findings and discussion.

2. How do elementary and intermediate level English-speaking JFL learners respond to dialogic CF with respect to inter- and intrapersonal issues such as affect-emotion and learner agency?
3. How do elementary and intermediate level English-speaking JFL learners perceive their own language learning through dialogic CF in their writing?

In what follows, I will first address research question 2 in section 5.1., in which I organized my reporting of findings in three subsections. Each subsection is organized around themes that emerged. The first subsection (5.1.1), Purpose and Views on L2 Writing, describes what writing in L2 Japanese meant to the participants, their goals as an L2 Japanese writer, and their views on grammatical accuracy. This theme, though it may not directly address research question 2, is included since it was useful in understanding (or interpreting) the participants' emotional response to dialogic CF. The second and third subsections address two components of

research question 2, affect and agency, respectively. Subsection 5.1.2, Learner Affect and CF Process, explores how the participants responded to dialogic CF in terms of the emotions that engendered in the feedback process, and how the feedback process impacted the participants' affect such as motivation and confidence. Subsection 5.1.3, Learner Agency in the CF Process, describes the two participants' thought process when they exercised their learner agency (i.e., asking questions, requesting for clarification when not convinced by the researcher explanation). In addition, the participants' reactions to the opportunity to exercise their agency by engaging in dialogic CF writing conference sessions are described. After that, in section 5.2., I describe and discuss factors that led the participants to perceive the occurrence of L2 learning (i.e., grammatical accuracy improvement) during their participation in the dialogic CF writing conferences. Chief findings and their significance are summarized at the end of each subsection.

5.1 JFL learners' affective response to dialogic CF

In this section, I first introduce information regarding how the two participants viewed L2 Japanese writing which appears to have influenced the way they responded to the dialogic CF on their writing. The two participants, Tina and Felix, demonstrated both similarities and differences in the way they viewed L2 writing and how they responded to the dialogic CF. The results from the two participants are reported one after another to allow comparison.

5.1.1 Purpose and views on L2 writing

5.1.1.1 L2 writing as a means of L2 (grammar) learning and the importance of accuracy

Tina and Felix differed with respect to whether they viewed L2 writing as a means of learning L2 in general, and of attaining linguistic accuracy in particular. Furthermore, there appeared to be a difference between Tina and Felix in terms of how they valued linguistic accuracy.

Tina. During Interview 1, which was conducted before the first writing conference, Tina reported that what she hoped to gain through the participation of the present study was to improve her command of Japanese in terms of grammatical accuracy. From her response in Excerpt 1, it appears as if Tina viewed L2 writing exclusively as a means of L2 learning in terms of grammatical accuracy improvement. However, later in Interview 1 when she was not directly asked about what she hopes to gain through the writing conferences, it appeared that improving grammatical accuracy is only part of her goals as we will see in the later section. In Excerpt 1, Tina expresses her difficulty with Case particles and associates accurate use of Case particles with better writing (i.e., better than her current writing) and clear communication.

Excerpt 1

Mizuki: What do you hope to gain out of this writing tutoring study?

Tina: I hope that I can write better in Japanese, like not get confused on which particles to use, like I am always confused between 'wa' and 'ga', or 'ni' and 'de', like which one should I use, so hopefully with that, I can write better, I am hoping to write clearly. (Tina: Interview 1)

The importance Tina gave to grammatical accuracy was evident in other interviews as well. In Interview 2 (conducted after one semester of writing conference participation), for example, she said "... as a language student I want to hear that like what I am trying to produce is correct because I want to speak correctly or like I want to write correctly."

Felix. Unlike Tina, Felix, by his account, does not care about grammatical accuracy both in his L1 and L2, and he does not see writing as an opportunity for language practice. For Felix, writing appears to be mainly a means of self-expression and therefore expressing his feelings

accurately is important to him. His view on the value of grammatical accuracy seems to be strongly influenced by his view on L1 grammatical accuracy, or by who he is as an L1 (English) writer who is fond of poetry and creative writing. It seems that Felix is not concerned (or not making connections) about ungrammatical forms causing communication breakdown or making the meaning unclear. Also Felix is not concerned that ungrammatical writing might be judged negatively by the Japanese speaking audiences. However, in Excerpt 2 below, we can see that Felix does want to learn Japanese grammar for the purpose of expressing his feelings accurately. In fact, during writing conferences when we tried to revise his sentences to express what he intended to express, Felix eagerly asked many grammar questions and did not accept suggested changes until he ensured that the revised sentence accurately expressed what he wanted to say.

Excerpt 2

*Caring more about being able to **express myself** even when I write in English, I don't really care about using correct grammar so much. It's **more about feeling right**, and like when you read it, it expresses exactly **what I was feeling** when I wrote it..... I don't want to know Japanese grammar just to know Japanese grammar. I mainly want to know because **I want to express myself in Japanese.*** (Felix: Stimulated Recall)

While Tina and Felix valued L2 writing and grammatical accuracy in writing differently, they both cared about writing and accuracy in writing. Tina, who studied in Japan for a year, was clearly aware that ungrammaticality causes miscommunication. Thus, she aspired to write accurately and valued L2 writing as one of the effective means of grammar learning. Felix, who had much less Japanese learning experience, viewed L2 Japanese writing based on who he is as an L1 English writer. Thus, he saw L2 Japanese writing only as a means of self-expression and did not value grammatical accuracy per se. However, a noteworthy finding was that his desire to

express himself accurately in Japanese in turn drove him to write accurately. Below, we will turn our attention to what the participants' view of L2 Japanese writing as a means of self-expression entails.

5.1.1.2 L2 writing as a means of self-expression with real audiences in mind: L2 identity construction

Both Tina and Felix considered L2 Japanese writing as a means of self-expression and consequently they had real audiences in mind when they wrote. In addition, Tina and Felix were both concerned about how they would be perceived through their writing, which suggests that they viewed that their L2 writing conveys or constructs their L2 identity.

Tina: While Tina views (journal) writing to be a good means of language practice, she does not view writing just as a mere language practice. In Excerpt 3 below, we can see that when Tina writes, she is keeping a real audience in mind by imagining a situation in which someone asks 'What did you do today?' Speaking situation is relevant for her writing because Tina assumes that writing and speaking abilities are connected, and thus when she learns to write better, her speaking ability will improve accordingly. Once again, Tina talks about how not knowing sufficient Japanese grammar prevents her from expressing what she really wants to express (in Excerpt 4, the example she gives is 'the details about her day' that she really wants to express). She further explains that she wants to try writing detailed things which she cannot easily say during a conversation, which relates to the first theme in 5.1.1.1 that she sees writing as a means of language practice. Also, from Excerpt 3, we can see that the reason she wants to improve her command of Japanese grammar is for the sake of communication beyond basic level.

Excerpt 3

*My sister is also learning Japanese, and she was telling me that she writes journals in Japanese, and I thought that's a good idea, so I started writing journals in Japanese, just to see what I can talk about, or just trying to talk about my day in Japanese, to see if I could write those types of things, so then **I thought if I could write it, maybe if someone ask "What did you do today?" I can give details about my day.** That's what I like to do with my writing, trying to give as much detail as possible to see if I can write it. But it's hard because, like I said before, my grammar, I feel like I'm using it only at a basic level when I want to try to write more complex sentences.*

(Tina: Interview 1)

Furthermore, we can see that writing is not a mere tool for communication, but it also is a means of self-expression and thus how she is perceived by her audiences is of importance to her. Beyond writing accurately, she does not want her writing to be basic, which suggests that she is concerned about how her writing is perceived by Japanese speaking audiences. It in turn suggests that Tina considers that her writing contributes to the construction of her L2 identity. Excerpt 4 illustrates these points.

Excerpt 4

*I also feel like I don't use like, even though I've been learning advanced grammar, I feel like I don't use the grammar that I've been learning, so I want to hopefully start to use different grammar patterns **so I'm not sounding, like, what is it, basic. I want to sound like I know what I'm talking about.***

(Tina: Interview 1)

Because Tina keeps real audiences in mind when she writes, she appreciated content-based feedback in which the researcher/teacher attended to content from which she could

understand how an audience responded to her writing. In response to the researcher's question asking whether she cared only about language (or form)-based feedback or both language- and content-based feedback, Tina said that content-based feedback was important to her. In Excerpt 5, Tina describes how she felt when she received content-based feedback in which the researcher/teacher commented that Tina's writing intrigued her and that she wanted to watch the movie Tina wrote about. Furthermore, content feedback engendered positive emotions as Tina explains at the end of Excerpt 6, 'it felt nice.' In addition, from Excerpt 5, we can see that Tina cared about what the researcher/teacher thought about her writing as an audience, and not only as a language teacher who provides grammar error correction and other linguistic feedback on her writing.

Excerpt 5

*Yeah, yeah, that was important, **it made me feel like oh wow she read and I influenced her like she wants to watch the movie too or she is interested in it too because of what I wrote, so it felt nice.*** (Tina: Interview 2)

Content feedback has been neglected as a factor that influences the efficacy of CF in L2 writing. However, the finding above showing how content feedback engendered positive emotion from the learner suggests that content feedback can be a factor that influences the efficacy of CF. Based on the claim of SCT that social and emotional factors can expand the learner's ZPD (Mahn, 2008), the potential of content feedback in facilitating L2 learning through CF in writing is a topic that should receive more attention in future research. Previous experimental written CF studies, for example, Bitchener and Knoch (2009) combined explicit CF with metalinguistic explanation assuming metalinguistic explanation as a variable that could influence the efficacy of CF. However, none of the studies, to the best of my knowledge, has

combined explicit/implicit CF with content feedback as a variable potentially influencing the efficacy of CF in L2 writing.

In addition to the audience's content feedback, it appears that for Tina it is very important that her audience is interested in learning what she really wants to say through her writing. In Excerpt 6, Tina explains that she liked the dialogic approach of CF in which the researcher asked her questions about phrases containing grammatical errors. The intention of the researcher/teacher was to guide Tina to self-correct her grammatical errors by providing very implicit hints or questions, and making the hint increasingly more explicit until Tina successfully self-correct her grammatical errors. Tina welcomed this dialogic approach to CF because she perceived it as a sign that the researcher/teacher was interested in understanding what Tina really wanted to say, and not merely understanding the basic meaning of her writing. Again, we can see that the interpersonal factor between Tina and the researcher/teacher who also took the role of her audience contributed to the positive writing experience for Tina. This excerpt strongly suggests that for Tina, L2 writing is much more than a basic communication tool; it is a means of self-expression. In addition, Tina perceived that the dialogic interactions were conducive in achieving what she really wanted, that is, to express her ideas accurately.

Excerpt 6

I liked that you asked the questions. So, then you..., because I feel that you want to know what I really want to say so I think when you ask me the questions that it helps me express to you what I am really trying to say. And then from my answers you can help me—like with the suggestions—like you suggest that I should say it like that, and this was what I wanted to express, so I like that you ask me questions.

(Tina: Stimulated Recall)

Tina's narrative in Excerpt 6 vividly illustrate the social nature of the feedback process in L2 writing. We can see that the researcher/teacher's interest in the content of Tina's writing, a behavior associated with *teacher confirmation*, produced positive affect in Tina. This finding lend support to previous research findings that *teacher confirmation* defined as "the process by which a teacher communicates to students that they are valuable, significant individuals" (Ellis, K., 2000, p. 265), makes a significant impact on learning (Arnold, 2011, p. 18). Furthermore, the finding adds to the field by revealing an L2 learner's emotional response to dialogic CF, which has not been considered in the few studies that investigated the efficacy of dialogic CF in L2 writing (Aljaafreh & Lantolf, 1994; Erlam et al., 2013; Lantolf & Aljaafreh, 1995; Nassaji & Swain, 2000). As the learner's emotional response to dialogic CF has not been discussed in the previous studies, I was surprised to find that dialogic CF procedure was perceived as the researcher/teacher's desire to understand what precisely the learner was trying to express through her writing.

Lastly, regarding Tina's view on L2 writing, during Focus Group (see Excerpt 7) when Tina was asked to compare her L1 English writing and L2 Japanese writing, she explained that her Japanese writing is more personal than her English writing, which gives us one more reason, in addition to the dialectic unity of cognition and affect claimed by SCT, for the need to look at CF in L2 writing as both cognitive and affective process. Excerpt 7 confirms that Tina sees L2 writing both as a way of language practice and as a means of self-expression. In addition, she explains that she uses Japanese writing to express personal matters which she does not write about in her L1 English. This finding was quite unexpected for me. I had assumed that an intermediate level learner who had lived in Japan only for one year could not feel that her L2 Japanese writing is more personal than her L1.

A pedagogical implication suggests journal-type personal writing to be one of the suitable types of writing to include in the U.S. JFL context, and perhaps also in other FL contexts.

Journal-type writing so far has received little attention in the field of CF in L2 writing as the majority of studies were conducted in an ESL context and hence the participants produced traditional essay type texts. Though it is not related to CF in L2 writing, Casanave (1994) has shown that journal writing facilitated L2 learning in an EFL context in Japan.

Excerpt 7

I think my Japanese might... be... more personal maybe... like when I had to write... When I write, even now I write journal in Japanese. I don't write a journal in English. I just like try to keep a daily journal in Japanese. Want to practice, but like so now I feel like now my Japanese writing has become... a little more personal. (Tina: Focus Group)

Felix. Similar to Tina, Felix also sees his L2 Japanese writing as a means of self-expression with real audiences in mind. However, there are many differences between them within this theme, which come from their L2 learning experiences, proficiency levels, and who they are as an L1 writer.

For Tina, it seemed as if her L2 Japanese was more important or more influential when it comes to expressing personal matters. In contrast, we can see that Felix's L2 writing is strongly influenced by his L1 writing values and L1 writer identity. In Excerpt 8, it appears that Felix sees his L1 English writing as a means of self-expression. Felix describes that English writing for him is 'like making a piece of art' and that he likes writing because 'you can be creative,' and he use to write poems which is a very creative genre of writing.

Excerpt 8

*I don't write that often. Umm, I, even when I was taking English classes, I was typically a slow writer and I didn't write that much, but, you know, I did like what I made, you know, it was kind of fun, like **making a piece of art** or something. I like it because you can be **creative**... Mmm, most of the time, I only write for a course work and things because I have a lot of work anyway. Um, but when I was in high school, I had more time and I used to write a lot more... I used to write, umm **poems** or occasionally like an essay, umm at the time I was studying Thoreau and Emmerson, so I liked, I liked trying to maybe imitate them.* (Felix: Interview 1)

Felix's view on L1 writing was reflected in his L2 Japanese writing as well. For example, in his writing #2 (see Figure 4), he used metaphors to describe the scene he saw during a lantern parade, and added a photograph he took (see below). I found this beautiful Word document he sent me as a reflection of his view of L2 writing that it is where you express your creativity, 'like making a piece of art' as he explained. It was unexpected that an elementary level learner used metaphor, and it was something Tina, a far more advanced learner, never did. Furthermore, it seems that the researcher's role as an audience was appreciated by Felix and perhaps motivated him to write beyond his current level, to try using expressions he never learned in classroom (e.g., metaphoric expressions), and to make the document esthetically appealing. Unlike Tina, Felix does not have extended study abroad experience in Japan, which is the case with the majority of JFL learners at the research site, and therefore does not have any particular (or specific) audiences in mind. Thus, it appears that the audience role played by the researcher/teacher provided purpose and motivation for Felix to write. Regarding the content feedback, Felix reported in Interview 2 as follows: "I liked it when you commented on the

content, I mean, if anything, it allows, it lets me know how it's received by someone who speaks the language.”

ランタンパレード

今年、初めての、アトランタのランタンパレードに行った。毎年、Labor Dayの後の土曜日に、人は Irwin St.に集まって Beltline で Piedmont 公園に歩く。そして誰かがランタンを持って来るから、友達といっしょにランタンを作った。家から遠くなかったから、集まる所に夢に決めた。家から出た時に、人はほどうでランタンと夢いていたを見た。くらやみに、赤い光のストリームみたい。集まる所には、ストリームに夢いた。着いた時にストリームは川になった。とてもきれいだった。



Figure 5.1 Lantern parade (Felix's writing #2)

During the focus group interview (Excerpt 9), Felix talked about the text in Figure 4 as his best writing. In this excerpt too, it is clear that Felix considers L2 Japanese writing as a means of self-expression and not a mere tool of communication. He expressed his satisfaction with the feedback process in which his writing was revised in such a way that it not only ‘made sense’ but also ‘sounded good.’

Excerpt 9

I was trying to describe the procession of lanterns. It was at night and so all the lanterns were lit up and looked like a river of lights. And I was trying to describe this sort of a river of light

*moving through the neighborhoods and I was talking about the little rivers of lights coming into a big river and how they were coming together. And so she, so she really helped me with the, get all these sort of, I don't know, and took this flowery nonsense and make it to like something that actually **made sense and sounded good** and so by the end, when I saw that I was like yes this was what I want to be able to do.* (Felix: Focus Group)

Felix's view on L2 Japanese writing appeared repeatedly in the data. Excerpt 10 is another example. Felix explains that what he wants to do through his Japanese writing is not just to 'get the point across' but he wants to communicate his meaning in a graceful manner. This in turn suggests that Felix is concerned about real audiences and how he (i.e., his L2 identity) is perceived by them through his writing.

Excerpt 10

Mizuki: What do you hope to gain out of this writing tutoring study?

Felix: I would like to be able to write so that the flow of the conversation is smoother and more graceful. I feel like my Japanese at the moment is maybe adequate to get the point across, but doesn't sound that good.

Mizuki: Oh, ok, ok. So not only just to communicate the meaning, you want your writing to be graceful and sophisticated.

Felix: Yes. (Felix: Interview 1)

5.1.1.3 Conclusion

To conclude, the findings reported in this subsection are consistent with previous studies which reported that L2 learners of less commonly taught languages tend to have clear goals even from the onset of their study (e.g., Yigitoglu & Reichelt, 2012). From Tina's and Felix's narratives, it emerged that their learning goal was to express themselves in Japanese through oral

or written communication. Furthermore, their desire to express themselves accurately in Japanese was the driving force to learn Japanese grammar and to produce grammatically accurate writing, which suggests that personal journal-type writing is one of the most suitable genres for JFL learners in the U.S. The findings of the present study add to the field by showing that American JFL learners gave importance to writing as a means of self-expression. Self-expression through writing is absent in the typical curriculum objectives of Japanese programs in the U.S. which only focus on oral communication and not written communication based partly on the assumed learner needs (Hatasa, 2011). That the participants of the present study valued writing in Japanese is perhaps a reflection of the recent changes in our society in which digital written communication has become prevalent.

I have also discussed that Tina and Felix had a real audience in mind when writing and thus they appreciated content feedback from the researcher/teacher which helped them understand how their writing would be perceived by Japanese speaking audiences. Moreover, Tina and Felix were concerned with the way how they would be perceived by Japanese speaking audiences through their L2 Japanese writing, which appeared to be a major driving force for them to improve their writing. This finding too resonates with Dörnyei's (2005) definition of motivation as "the desire to reduce the discrepancy between one's actual and ideal or ought selves" (p. 101).

5.1.2 Learner affect and CF process

This subsection describes the participants' emotional responses to the dialogic CF process in relation to their L2 learning, which partly addresses research question 2. As we will see below, participants responded to the dialogic CF quite emotionally, in addition to cognitively processing the linguistic input from the researcher/teacher, which is congruent with Lantolf and

Pavlenko's (2001) view of an L2 learner as a whole person and not a linguistic input processing device. Themes emerged from interview data of the present study include *Supportive atmosphere facilitates learning* (section 5.1.2.1), *Teacher's confidence in the learner* (section 5.1.2.2), *Perception of accuracy improvement and motivation* (section 5.1.2.3), and *Confidence and motivation* (section 5.1.2.4). I added the participants' names in parentheses after each subtitles to indicate from whose data the theme emerged as not every theme emerged from both participants.

5.1.2.1 Supportive atmosphere facilitates learning (Tina and Felix)

Arnold (2011) asserted that "concern with affect could be considered as a prerequisite for the optimal cognitive work of learning to take place" (p. 14). Tina's and Felix's narratives echo with Arnold's assertion by capturing the dialectic unity of affect (i.e., supportive atmosphere) and cognition (i.e., learning Japanese grammar). Tina's and Felix's results are reported below separately.

Tina. It appears that supportive atmosphere the researcher/teacher tried to create encouraged (or allowed) Tina to write freely without limiting herself to using familiar grammar for the fear of making errors, as well as to write very personal matters (e.g., about her heartbreak) without inhibition. Some scholars (e.g., Truscott, 1996) argue that the provision of (written) CF in L2 writing can discourage the learner to use a wide variety of linguistic structures to avoid error correction. The results of this study suggest that affective factors such as supportive atmosphere can encourage the learner to write freely without limiting herself for the sake of avoiding error correction from her teacher. Furthermore, Tina perceived the researcher/teacher as someone who 'helps' her make her writing sound better, and not someone who authoritatively points out her errors and corrects them. In other words, Tina felt she, and not the teacher, had control over her learning through writing, which relates to learner agency

discussed in the subsection 5.1.3. It appears that for Tina the supportive approach in addressing her errors was important; she made sure that that the focus group facilitator, Dave, heard this point by adding to what Felix said about the feedback process. Excerpt 11 begins with Felix's description of the feedback process followed by Tina's comment about the researcher/teacher.

Excerpt 11

Felix: The first thing she would do she would hand me just a printed out a copy of my composition and... a pencil and underline anything I would have questions on and then... we would sort of go through and with each sentence, if I had a—I'd underline with pencil we would talk about it and I'd ask my question and she would explain it uhm... or ask, in some way we would go over it and if there something else wrong and I didn't underline it and she would say there's something wrong with the sentence can you figure it out what it is. And then I would try to figure it out myself and if I could then I would change it with a blue pen, but if I couldn't then she would change it with a red pen.

*Tina: That's not it actually. **She's really nice about it actually...***

Dave: Really? Tell me more.

Tina: She was more like (clears her throat) girl no that's wrong, well in Japanese we actually say it like this and so we put it like that.

Dave: So you don't feel attacked?

Tina: Not at all.

Dave: You don't either, right, Felix?

*Felix: No, she was very like...uhm...what you call...she was someone that like...**someone that encourages you through positive reinforcement**, she's very like uhm...positive reinforcement.*

*Tina: She's very much like that. **That's why I'm not afraid to make mistakes or write anything personal** because I know she'll help me make it sound better.*

(Tina: Focus Group)

Felix. In Excerpt 11 above, Felix describes the researcher as someone who encourages him through positive reinforcement. For Felix, positive reinforcement and/or supportive atmosphere appears to be an important factor which facilitates learning. In Excerpt 12 below, he explained how stressful atmosphere inhibits his learning and supportive atmosphere allows him to learn.

Excerpt 12

Mizuki: Umm, was there any type of comment from me or interactions that you particularly enjoyed or disliked?

*Felix: Umm... You frequently gave me **compliments and very supportive**, umm, that helps. Umm there is nothing in particular that I didn't like. I liked that there is **not a lot of pressure** associated with it. Umm because you know my schedule is difficult sometimes, so it really helps to, **it helps to keep me from developing that mind frame of wanting to avoid something**, you know, umm like sometimes I won't even realize it but I'll start to dread doing something if every time I go is stressful, so it's hard to stay motivated about that, but you know this is so **stress free** that it was very easy.*

(Felix: Interview 2)

What Felix described in Excerpt 12 is consistent with SCT which posits the dialectic unity between affect and cognition. This claim has more recently been supported by findings of neurobiological research. Damasio (2005), for example, argues that a person's brain cannot work optimally when he/she is feeling stress or threat. Below we will consider another instance in which affective factor facilitated L2 learning through the dialogic CF process.

5.1.2.2 *Teacher's confidence in the learner (a behavior of teacher confirmation):*

interpersonal factor (Tina)

In subsection 5.1.1., we have discussed how teacher confirmation (i.e., teacher's interest in the content of the learner's writing) facilitated L2 learning in the dialogic CF process. In this subsection, we will discuss how another manifestation of teacher confirmation, teacher's confidence in the learner's ability, facilitated L2 learning from a perspective of sociocultural theory that posits the dialectic relationship between cognition and emotion (Vygotsky, 1978). Tina's narrative in Excerpt 11 captures the dialectic unity of cognition and emotion, and illustrates how her ZPD was expanded due to the positive emotion engendered during the dialogic CF process.

Excerpt 13 comes from the stimulated recall during which the researcher/teacher played one part of the audio-recording of the previous writing conference when the researcher was providing a few hints to help Tina's self-error correction by following the regulatory scale of Aljaafreh and Lantolf (1994).

Excerpt 13

Mizuki: Is this approach [that Tina received gradually more explicit help through dialogic interactions with the researcher/teacher] helpful for your learning or did you want to hear the right answer from me and move on?

Tina: No. I like trying to guess... Yeah, that's totally fine, so we should keep doing that.

Mizuki: Okay, okay. So I wasn't sure if you felt that it was a waste of time or an insufficient use of your time, or ...

Tina: Oh, no no.

Mizuki: You felt you were trying to remember or trying to think, and that was helpful?

*Tina: Yeah, I was trying to think so that was helpful. Yeah, yeah. Because you, **it sounded that you had confidence that you thought I knew the word** so I was like 'Oh, there must be another word, but, yeah, we don't really use the word.'
Yeah, yeah, I like the way you said it.*

Mizuki: And then you remembered it?

*Tina: Yeah, once you said it, of course I would remember it, but trying to think about it myself, it was hard to think but **I felt like you thought that I know the word so "I'm going to keep giving hints."** So I was really trying to remember another word that wasn't 'watashi.' So I like the challenge in thinking.*

(Tina: Stimulated Recall)

From Tina's narrative above, we can see that she liked the dialogic CF procedure that followed Aljaafreh and Lantolf's (1994) regulatory scale for two reasons. The first reason relates to a cognitive factor; she had an opportunity to think and correct her errors instead of just receiving the correction from the beginning. The second reason relates to an affective factor; Tina thought that the researcher/teacher had confidence in Tina's Japanese ability that she would be able to self-correct the error in question in her writing. Moreover, Tina further explained that by feeling that the researcher/teacher had confidence in her Japanese ability, she was able to

think more, which, in turn, led her to produce the correct form. In other words, it appears that the affective support Tina felt allowed her to expand her thinking or her cognitive ability to process Japanese grammar.

Tina's narrative persuasively affirms the sociocultural understanding that cognition and emotion are dialectically united (e.g., Lantolf & Poehner, 2008; van Lier, 2004; Vygotsky, 1978) and also that a learner's ZPD can be expanded by affective factors (e.g., Mahn, 2008).

Furthermore, this finding revealed an affective benefit of dialogic CF not discussed in the previous CF studies framed in SCT (Aljaafreh & Lantolf, 1994, Nassaji & Swain, 2000). That gradual help following the regulatory scale would be perceived by a learner as an indication of the researcher/teacher's confidence in the learner's ability was unexpected as I was merely following the regulatory scale although, in retrospect, I believe I was unconsciously assessing Tina's ability in an attempt to work within her ZPD. Even more unexpected was that my (or a teacher's) confidence in Tina's Japanese ability mattered to her to the extent that influenced her cognitive ability. The pedagogical implication include the following: the importance of affective consideration during the feedback process in L2 writing; and that one of the ways an L2 teacher can engender a positive emotion in her student is to express her confidence in her student's L2 ability. In the following subsection, we will consider other instances in which positive emotions, in relation to motivation, were engendered.

5.1.2.3 Perception of accuracy improvement and motivation (Tina and Felix)

Dörnyei (2005) defined motivation as "the desire to reduce the discrepancy between one's actual and ideal or ought selves" (p. 101). His definition of motivation is instrumental in understanding the salient relationship between perceived accuracy improvement and motivation that emerged from Tina's and Felix's narratives.

Tina. She expressed positive emotions when she felt she was learning something new (i.e., grammar, vocabulary) and when she perceived that her grammatical accuracy improved. Based on her L2 writing goal to become able to express herself more clearly which requires more accuracy on her account, it seems that she felt happy for becoming more able in expressing herself through L2 writing, or using Dörnyei's (2005) terms, for reducing the discrepancy between her actual and ideal self. She also reported that the researcher's praise on her accuracy improvement made her feel good. This perhaps relates to the fact that she kept a real audience in mind when she wrote and thus how she is perceived by her audience is important for constructing her L2 identity.

The connection between perception of accuracy improvement and motivation is very clearly expressed in Excerpt 14 below from the focus group interview. We can see that when Tina perceived her grammatical accuracy improvement, in this case from the researcher/teacher's comment, she experienced positive emotion 'that was really nice' and also her motivation to write and her desire for continued improvement increased.

Excerpt 14

Tina: I know like it made me want to write more, especially when I found that I was improving like when the last conference we had last year. She said all my particles usage was correct. That was really nice, and so I don't want to stop studying Japanese.

Dave: So what's your ultimate goal? Where are you goin'?

Tina: As far as I can go, man. I want to keep getting better....I want to sound Japanese. Some people look at me and say 'Did a Japanese write this?' That's

what I want. It's probably going to take me the rest of my life to get it like that,

but....

(Tina: Focus Group)

The connection between perception of improvement and motivation to write and to learn Japanese was expressed several times by Tina. Excerpt 15 is another example in which Tina chose to talk about her Japanese improvement which felt nice and that because of her perception of improvement, her motivation to keep writing had increased. We can also see the reason Tina cares about improving her Japanese is to express herself (i.e., her thoughts and feelings) accurately and be perceived by the audience and construct her L2 identity by the way she wanted to. From Excerpt 14 above, we can reasonably assume that an L2 identity she wishes to construct is a person who achieved a high level of L2 Japanese proficiency to the extent that she sounds like a native speaker. This, in turn, explains why she cares about accuracy improvement and why the perception of accuracy improvement made her happy and increased her motivation to write.

Excerpt 15

Mizuki: All right, before we conclude, is there anything else you would like to add, any comment about what we did?

*Tina: I had a real, **it was really nice**, like I really do feel like my, at least **my Japanese writing, has improved**, and so that's why seriously, I know I keep saying it but I **really want to like continue writing** so that I don't lose what I've learned here, or like in Japan, which is why I was trying to write and why I wanted to participate in this because I thought oh I can get at least one day a week I can speak Japanese because I don't want to forget all of the stuff that I learned in Japan. So, I felt like I produced well enough **I feel now that I can express a little better my like what I'm thinking or my feelings**, but I want more practice with it. So,*

I'll keep on writing. Thank you!

(Tina:

Interview 2)

Felix. As was the case with Tina, Felix reported that his perception of improvement in his L2 Japanese writing motivates him to continue to learn Japanese as seen in Excerpt 16. However, unlike Tina, the perception of improvement played a role in increasing his confidence in his ability to write in Japanese. The difference between the two participants seems to stem from different goals, in terms of proficiency levels, they had. Felix, whose proficiency level was much lower than Tina's, was not trying to sound like a native Japanese speaker as it was not a reasonable goal considering that he was an elementary level learner at the time he participated in this study. Felix's narrative in Excerpt 14 reflects his needs as an elementary level learner who needed to feel confident in his Japanese ability. As mentioned earlier, Hatasa (2011) stated that the slow progress typically experienced by English speaking learners in a JFL context is one of the greatest obstacles for maintaining the motivation to learn Japanese.

Excerpt 16

Mizuki: Regarding your motivation, motivation to write in Japanese, or just to learn Japanese in general, do you feel any change comparing to before you participated in this study and right now.

*Felix: I feel more confident in my ability to write, I mean, my speaking ability is probably the same, but just **being successful at some facet of it does motivate me, or keeps me motivated to continue to learn.*** (Felix: Interview 2)

Lastly, because of the benefits they received for their L2 learning through dialogic CF, both participants commented that there should be a dialogic CF writing class as seen in Excerpt 17 below.

Excerpt 17

Dave: Any other last recommendation, or comments, or questions, or concerns?

Felix: I uh... so if like... it would be nice if there was like a, if this was a class.

Tina: I was just about to say that. If you do this more,

Dave: Tell me more about that.

Tina: Just because, I don't know, I think a lot of students studying Japanese at X University [her university] too, there needs to be more for them available to get better at Japanese. And I feel like that this would help you get better.

Maybe if there was like a writing conference class. I don't know how she would do that with a class of 30. (Tina and Felix:

Focus Group)

Since the predominant focus of CF in L2 writing research has been on the accuracy improvement evidenced in new pieces of writing, learner perception of L2 learning (i.e., accuracy improvement) has received little attention. However, the student voices heard in this subsection offers an important insight that learner perception of L2 learning can influence motivation as defined by Dörnyei (2005). The data reported here suggests when the participants perceived accuracy improvement in their writing, they also perceived the reduction of “the discrepancy between one’s actual and ideal or ought selves” (Dörnyei, 2005, p. 101) where the ideal self is a confident L2 Japanese learner (Felix) or an L2 Japanese learner who ‘sounds Japanese’ (Tina).

A pedagogical implication that emerges from this finding is the importance of learner perception of L2 learning in maintaining motivation to learn the target language. This finding is especially relevant in the JFL in the U.S. context where the maintenance of student motivation is one of the biggest challenges for JFL teachers (Kondo, 1999; Samimy & Tabuse, 1992). As discussed in Hatasa (2011), English speaking JFL learners typically lose motivation to study Japanese after a few semesters due to the slow progress they make because of the difficulty of Japanese. The Foreign Service Institute (FSI) of the US Department of State categorizes Japanese among the most difficult languages to learn. According to the FSI, to achieve general professional proficiency, 2200 class hours is required for Japanese while only 575-600 hours is required for Spanish (National Virtual Translation Center, 2007). It would be reasonable to assume that JFL learners in the US tend to get frustrated for their very slow progress. While JFL teachers cannot do anything about the difficulty of Japanese, they can maintain learner motivation by increasing their perception of L2 learning by incorporating personal journal-type writing followed by dialogic CF. The factors that lead to learner perception of improvement during the dialogic CF process will be discussed later in section 5.2. in which we address research question 3. In the next subsection, we will consider confidence, which also influenced motivation.

5.1.2.4 Confidence and motivation (Tina and Felix)

For both Tina and Felix, perception of linguistic improvement/development appeared to have increased their intrinsic motivation to learn Japanese in general and to write in Japanese in particular. In this subsection, I discuss how the learners' confidence changed through the dialogic CF and the connection between confidence and intrinsic motivation. With respect to this

theme, there were some differences between Tina and Felix, which may have stemmed from the difference in their proficiency levels.

Tina. As can be seen in Excerpt 18, Tina perceived language learning through the dialogic CF process, but, despite the perception of language leaning, she felt only modest increase of her confidence. The reason she felt only a little more confident could be related to the fact that she was trying to improve her control of Japanese Case particles, a notoriously difficult structure to learn for English-speakers (Iwasaki, 2006) as English lacks overt Case assignment. Despite the modest increase of confidence, her intrinsic motivation increased because of her perception of language learning as seen in Excerpt 19. That is, she still does not feel confident about her control of Case particles (which is not surprising considering her proficiency level), but she does feel improvement in particle use and more generally, which drives her to continue to write and learn Japanese.

Excerpt 18

*Mizuki: Do you think you learned something from participating in writing conferences?
And if so, how did you learn them?*

*Tina: Yeeees! I feel like I have like how to use the particles, like how you taught me the nominal, the adjective, and the verbal predicate. And like when I would, what type of particles to use with those different predicates. So, now I feel **a little more confident** and like using and picking the right verb, not verb...particles. (Tina:*

Interview 2)

Excerpt 19

*Mizuki: Ok, and through two or three months that we spent together, do you feel any change in terms of your **motivation** to learn Japanese or to write in Japanese?*

Tina: Yeah [note: her tone of voice expressed strong agreement]. I definitely want to continue writing because I feel like I've come so far, like at first maybe my particle usage was wrong, but now like this last one I wrote, all particles were right, you said, [note: her tone of voice expressed her enhanced motivation to keep improving and her being proud of her improvements] so now I want to keep writing and improving because I do want to improve my Japanese.

(Tina: Interview 2)

Felix. Unlike Tina, it appears that Felix greatly increased his confidence in his Japanese and that change led to the increase in his motivation to study Japanese. As Felix was an elementary level learner, his concern was more about general communication and he appeared not yet concerned about fine tuning his particle use.

When asked about his motivational change after participating in the writing conference, Felix stated that his confidence in writing has increased as seen in Excerpt 20 below, which suggests at least a synergistic relationship between confidence and motivation. Although Felix did not mention the word 'motivation', he made the connection between confidence and motivation in another interview as seen in Excerpt 14. In Excerpt 20, Felix compared his experience in Japan which was overwhelmingly challenging and his writing conference experience that was manageable which resulted in his increased confidence in writing in Japanese which extended to his confidence to communicate in Japanese in general. From a sociocultural perspective, this can be interpreted that instruction designed to lead the learner's

(language) development can increase the learner's confidence. Felix's experience trying to communicate with local people in Japan was beyond his ZPD and thus he felt overwhelmed. On the other hand, his writing conferences were designed to lead language development in the learner's ZPD, and through this learning experience, Felix increased his confidence in writing.

Excerpt 20

Dave: Okay, okay. How about motivation? Do you feel more motivated in your writing after these conferences... to continue writing?

Tina: I think so. Yeah for sure.

*Felix: I think it's **built up my confidence in writing a lot**, like, before I was maybe on the verge of being **overwhelmed** by the language in general because I've been there [Japan] and I realized how much I didn't know and how difficult it still was to speak with people and communicate with people.... And by doing the writing conferences it's almost like **breaking down into smaller pieces** and so we're just focusing on writing and we're like really looking specifically how to make it better and succeed at that you feel like you can do your best at it too.*

(Felix: Focus group)

In addition, it appears that Felix increased his confidence through the researcher's comments acknowledging his improvement which engendered positive feelings as seen in Excerpt 21 below. During the stimulated recall interview, Felix and the researcher listened to their writing conference recording in which the researcher commented on Felix's correct use of a grammatical structure which he had trouble controlling previously. We can see how interpersonal factor (the researcher's recognition of Felix's accuracy improvement which Felix

perceived as ‘encouraging’) influenced his confidence level which in turn increased his motivation to write.

Excerpt 21

Felix: I think it’s encouraging when you do that [to take note of his improved control over a given grammatical structure].

Mizuki: Encouraging... So in your opinion should I keep doing that?

Felix: It’s a nice feeling.

Mizuki: Okay, it’s a good thing to do. Okay. So, in your opinion ... does ‘nice feeling’ promote your learning?

Felix: It’s important because it builds confidence.... Like when speaking and writing, you don’t want to do it as much if you don’t feel confident.

(Felix: Stimulated Recall)

5.1.2.5 Conclusion

The results of subsection 5.1.2 showed how affective-emotional factor emerged in the dialogic CF process developed by the pioneering work of Aljaafreh and Lantolf (1994). Although it was not discussed in their article, during the dialogic CF designed to lead (or facilitate) L2 development in the learner’s ZPD, all aspects of the learner as a whole person including acting, thinking, and feeling were involved which is how learning in the ZPD is described by Wells (1999). Furthermore, the findings of this section lend support to the argument made by Mahn (2008, p. 117) that one’s ZPD can expand or narrow due to emotional factors (e.g., anxiety, confidence) and social factors (e.g., the way one interacts with her teacher). The two participants reported that lower anxiety level, feeling more confident, and the supportive environment created by the researcher helped them learn L2 Japanese better. This finding lend

support to the claim made by Lidz (1991) that supportive atmosphere is one of the elements of effective scaffolding. Motivation is another affective factor we have considered, and it was found that the learners' perception of their L2 improvement is closely related to motivation. It is outside of the scope of the present study to discuss the relationship between perceived and actual L2 development, but in the case of Tina and Felix, their perception of L2 development is consistent with what the analysis of accuracy rate has shown in chapter 4.

An important pedagogical implication that emerged from this subsection relates to the importance of treating CF in L2 Japanese writing as an affective process, in addition to being a cognitive process, and positive affect facilitates L2 learning and increases learners' intrinsic motivation to learn. L2 Japanese teachers can make the CF in writing as an optimal opportunity to facilitate students' L2 learning while increasing their motivation by creating a positive and supportive atmosphere through their feedback and responding to the students' writing as an audience (by providing content comment) to show their interest in their students' writing.

In the following subsection, we will turn our attention to another affective factor, learner agency, and discuss how learner agency influences L2 learning through CF on writing. The dialogic CF process of the present study which was modeled after Aljaafreh and Lantolf's (1994) study, provided ample opportunities for the participants to highly exercise learner agency (e.g., to make decision, to take control of their learning, to question the researcher/teacher, etc.), which is yet another strength of Aljaafreh and Lantolf's (1994) operationalization of CF in L2 writing, not discussed in their pioneering work of applying principles of sociocultural theory to feedback process.

5.1.3 *Learner agency in the CF process*

In this subsection, we will focus our discussion on one aspect of affect, learner agency, an important construct in sociocultural theory. From the qualitative analysis of the interview data, a portrait of a language learner as agent (who felt emotions, made choices, made decisions whether to accept teacher corrections or not, whose confidence and motivation changed in response to the dialogic CF, etc.) emerged. In accordance with the claim made by SCT applied linguists (e.g., Lantolf & Pavlenko, 2001; Swaine, 2006), the learners of the present study, who participated in the dialogic CF process, appeared as a whole person rather than a processing device of linguistic input, though processing of linguistic input was part of what they did. It also appeared that the operationalization of CF in L2 writing of this study, modeled after Aljaafreh and Lantolf's (1994) study which applied the core SCT construct of learning in ZPD, facilitated or encouraged the two JFL learners to highly exercise their agency.

Both Tina and Felix highly exercised their learner agency during the writing conferences by taking an active role in their learning (e.g., asking questions, requesting grammar explanation, negotiating/questioning the correction given by the researcher, trying to correct their grammatical errors before receiving the researcher's corrections, and choosing the topic and length of their weekly writing), which resulted in their satisfaction with the learning experience. In addition to general satisfied feelings, the learners increased their confidence as an L2 learner/writer and the provision of dialogic CF ultimately contributed to the increase of their intrinsic motivation to learn Japanese in general, and to write in Japanese in particular. Also, through the dialogic CF process in which the researcher/teacher provided increasingly more explicit help until the learner's successful self-correction, the learner perceived the researcher/teacher as someone who *helped* them express what they wanted through Japanese

writing and not someone who told them what to do or criticized their grammatical errors, which in turn suggests that the dialogic CF process encouraged (or provided the opportunity for) the learner to actively exercise their agency by owning their learning process. In what follows, I will describe and discuss how the two participants owned their learning process under three themes that emerged: (a) learners' active engagement, (b) choice and autonomy, and (c) opportunities to ask questions.

5.1.3.1 Learners' active engagement

The operationalization of CF in writing as self-correction with the researcher/teacher's scaffolding (adopted from Aljaafreh & Lantolf, 1994) provided an opportunity for the learners to take (some) control of their learning by assuming an active role in the CF process. Both learners took advantage of this opportunity and felt satisfied with their active role in the CF process in writing conferences. An example comes from excerpt 22 in which Felix explains how the self-correction process helped him finally grasp the correct use of the adjectival forms, and furthermore, he attributes the new understanding of the grammar to his active role in the grammar error correction.

Excerpt 22

Mizuki: Ok, so writing conferences helped you with vocabulary, especially. Anything about the grammar?

Felix: Yes. We went over a lot of the, a lot of the grammar I thought I already learned, but I was, had small errors with, and by going over it I was able to go back and fix it. Like the short and long form of the adjective, it's something I've been using for a really long time, but it never sunk in that that was the long form.

Mizuki: I see. Why do you think it sunk in this time?

*Felix: Umm, I guess, because **I specifically try to use it, and then I had to change my work.** Like it helps to see it on the board, frequently that's enough, when you just see specific examples on the board. Umm, but for me, at least, **it helps also if I try and use it myself and then it's like I specifically fixed the error that I made.***

*Mizuki: Ok, it's a good point. It's **not like passive**, but you actively constructed ...*

*Felix: Yeah, it's sort of like **learning through an action** as opposed to listening. So like if your listening comprehension (Note: Felix is talking about understanding/learning grammar through listening to an explanation) is not as good, then **actually doing the action of writing it and doing the action of fixing it is better...** It forces me to consider the problem, or consider the fact that there is a problems, I had to consider the whole sentence umm before learning what the correct answer is. Umm sometimes I get it by myself, but even if I don't, **it sort of gets me involved** instead of just going through it and putting the answer real quick. (Felix: Interview 2)*

5.1.3.2 Choice and autonomy

It appeared that by being given choice and autonomy, the learners were able to write without anxiety and also to feel motivated to write. Below in Excerpt 23, Felix explains that having choice of how much to write resulted in the positive writing experience free of stress. In addition, he mentions that he liked the ability to choose the topic for his writing because, if not, the writing assignment can be boring.

Excerpt 23

Mizuki: Ok, the stress free, did it come from the fact that it was not associated with your grade, or was it because of the way how I conducted the conferences?

*Felix: I think it's because there is **no requirement on how much I had to write**, so it allowed me to just write what I had time for... **I like being able to decide what to write about**. Being given something to write about is ok too, but frequently, at least with my English classes, they'll give you something that's really boring, so...*

(Felix: Interview 2)

Tina shares similar opinion which is shown in Excerpt 24.

Excerpt 24

*But if she asked me to write more, I think I could have tried. But **I like having control over what I have to write**.*

(Tina: Focus Group)

Above, both participants in essence state that they like having choice and thus autonomy in their writing. Once again, a picture of language learners as a whole person emerged from the interview analysis. The learners responded to the dialogic CF process not only cognitively (e.g., linguistic input noticing and processing) but affectively as a whole person. Although the participants did not mention the connection between choice and intrinsic motivation, according to Williams, M. (1994), choice is a component of motivation. Arnold (2011, p. 15) claims, 'Choice is inherently motivating,' and she suggests that building choice into language instruction is one way to promote L2 learning.

The qualitative analysis so far suggests that the efficacy of CF cannot be fully understood without considering learner affect. Next, we will consider learners' emotional responses to the opportunity to ask questions during writing conferences.

5.1.3.3 Opportunity to ask questions

During the dialogic CF process, both participants asked many questions to negotiate the researcher/teacher suggested revision by asking if and why what they wrote is incorrect and to

make sure that the revision accurately expresses the meaning they wanted to express. The dialogic exchanges initiated by the learners' question usually led the researcher/teacher to explain the Japanese grammar in question which, I believe, were within the learners' ZPD. Such explanation led the learners to perceive the occurrence of L2 learning. Regarding the explanation provided during the writing conferences, Felix explains "the one-on-one really having your individual writing critiqued, **having it explained helps immensely**" (Interview 2).

In case of Tina, in addition to being helpful with language learning, the researcher/teacher explanation was intertwined with her emotions. In Excerpt 25, Tina comments that a teacher CF without an explanation is discouraging because the message she receives is "These are wrong and you (the learner) are stupid." In addition, we can see that the way the researcher/teacher points out or addresses errors is also important. In Tina's description in Excerpt 25, it appears that the researcher/teacher's use of *tyotto*, which literally means 'a little' and is often used to soften the negative meaning of the word that follows helped avoid negative affective response from her. The writing conferences were conducted in Japanese, but interviews were conducted in English and thus in Excerpt 25, Tina translated what the researcher/teacher said to her.

Excerpt 25

Mizuki: Ok. And it's only language classes that teachers say this is wrong [Mizuki is rephrasing what Tina had just explained], but it does not discourage you.

Tina: No, not if the teacher like explains it, like you explained why am I, you never even said this is wrong and you are stupid, but you said like well this is a little wrong and this is why because we don't say it like this in Japanese, we say like

this, so you need a particle that comes here because that's how Japanese works.

So, yeah it was't yeah, never never discouraged or anything like that.

(Tina: Interview 2)

When the researcher/teacher asked what Tina meant by 'this is wrong and you are stupid,' she explained that "The message I get from a teacher that does not explain their grammar corrections on a composition that I wrote is that the teacher does not care about my language development." This is a clear example showing how much affective factor is involved in the CF process in writing and I argue that the efficacy of CF in L2 writing (e.g., whether explicit written CF promotes linguistic accuracy) can only be fully understood when we recognize the CF process as both cognitive and affective. From Excerpt 25, we can assume that when Tina receives (written) CF, not only she cognitively processes that information by noticing that there are errors and the difference between the corrections and what she originally wrote, but also she processes the information affectively by guessing the teacher's intent, in this case, 'this is wrong and you are stupid.'

A pedagogical implication of this finding is that attention to learner affect is of crucial importance to effective L2 instruction. Tina's comment regarding teacher written CF without explanation echoes the voices of Saudi ESL learners reported in Mustafa (2012) who responded to their teacher written CF without explanation with strongly negative emotions. Providing both CF and explanation would be better as far as learner affect is concerned. However, those L2 teachers who teach large classes, may not be able to afford the time to do so. In which case, clear communication of the teacher's intention might alleviate the negative emotional responses from students. A teacher in such a situation can perhaps explain to her students that due to the class size, she can only provide corrections and not explanations, but her intention is not to make her

students feel bad, but to provide as much support as she could. In addition, a teacher could also provide a mini grammar lesson in class after providing (written) CF on the structure that many students had difficulty using correctly.

5.1.3.4 Conclusion

This subsection highlighted the importance of learner affect in the feedback process by focusing on agency. We have seen that, in addition to creating a supportive environment, allowing the learner to exercise his/her agency is one of the key components of the feedback process in writing which facilitates L2 learning.

5.1.4 Conclusion: Research question 2

The qualitative analysis reported here addressed research question 2: How do elementary and intermediate level English-speaking JFL learners respond to dialogic CF with respect to inter- and intrapersonal issues such as affect-emotion and learner agency? While exploring this question, it was found that the participants of the present study viewed L2 Japanese writing as a means of self-expression which they associated with conveying and constructing their L2 identity. I believe that because of this view of L2 Japanese writing, the learners' response to the dialogic CF was very much intertwined with affect-emotion, perhaps more so than when learning other subject areas. The learners were not only concerned about linguistic issues but also, perhaps, more concerned about how they (or their writing) would be perceived by real Japanese speaking audiences, in other words, their L2 identity construction. Furthermore, their concern about linguistic accuracy was closely related to the issue of self-expression. They cared about linguistic accuracy so that they could express their thoughts and emotions accurately which resulted in a construction of their L2 identity in the manner they desired. While the dialectic nature between cognition (e.g. L2 development) and affect (e.g., emotion, motivation, agency,

L2 identity, etc.) has been discussed in L2 learning literature (e.g., Arnold, 2011; Imai, 2010; Garrett & Young, 2009) and that framed in sociocultural theory (e.g., Lantolf, 2012; Lantolf & Poehner, 2008; Mahn & John-Steiner, 2002), the issue has rarely been discussed in the body of (written) CF in L2 writing research (See Bitchener & Ferris, 2012, for an overview). Arnold (2011), citing Stevick (1980, p.4), argues that successful language learning depends largely on the affective factors rather than on factors closely related to cognition such as linguistic analyses and techniques. Findings of the present chapter is consistent with the claim made by Arnold, and I argue that affective factors play a substantial role in the feedback process in L2 writing.

5.2 JFL learners' perception of language learning through dialogic CF

This section addresses research question 3: How do elementary and intermediate level English-speaking JFL learners perceive their own language learning through dialogic CF in their writing? In section 5.1.2.3, we have already discussed that both Tina and Felix perceived language learning through participating in the dialogic CF writing conferences. In this section, we turn our attention to how they perceived their language learning. I qualitatively analyzed the interview data to identify factors that led the two learners to perceive the occurrence of language learning, and two themes emerged: teacher's acknowledgement and self-realization of increased competence.

5.2.1 Teacher's acknowledgement as a source of self-perceived language learning (Tina and Felix)

It appears that Tina perceived language learning mainly from the comments she received from the researcher/teacher. Excerpt 26 below is an example showing that the researcher/teacher's comment acknowledging the accurate use of particle has led Tina to perceive language learning through participating in the dialogic CF writing conferences. We can

also reasonably assume that Tina believes that writing followed by the dialogic CF process is very facilitative of her language learning, and therefore she considers writing to be a good method of the Japanese Language Proficiency Test preparation. The connection Tina made between writing and language learning has been posited by L2 writing scholars like Manchón (e.g., 2007) who argues for the language learning potential of L2 writing. In addition, we can see that perception of language learning through dialogic CF increased her motivation to write in Japanese and study Japanese in general.

Excerpt 26 is an example showing that Tina perceived language learning from the reduced written correction that the researcher wrote during the writing conferences. Excerpt 27 shows how Tina perceived language learning through the researcher's verbal acknowledgement of her grammatical accuracy.

Excerpt 26

Mizuki: So, regarding the red marks I wrote, how did you feel about all the red things on your paper?

*Tina: Umm, it didn't, didn't discourage me...Because I guess I'm used to it, like, in Japan too, like there were like bunch of red marks [laughing] ... So, it's fine. I figured that's how learning happens so I won't make these mistakes again. **But then when red started to get less, I was thinking wow maybe I really am learning, so it made me feel good too.** (Tina: Interview 2)*

Excerpt 27

*Yeah! I definitely want to continue writing because **I feel like I've come so far**, like at first maybe my particle usage was wrong, but now like this last one I wrote, **all particles were right**, you said, so now **I want to keep writing and improving** because I do want to improve my*

Japanese. I want, my goal is to pass the N2 test (of the Japanese Language Proficiency Test).

*Umm, not this year I think next December so I can get like a year to study for that because all of my Japanese classes are done now so **I do want to continue to write so that I can pass that test.***

(Tina: Interview 2)

Although in Excerpt 27, Tina only talks about passing the test as the reason she wants to improve her Japanese, it appears that the reason for wanting to improve her Japanese is also connected with her desire for self-expression in Japanese and the L2 identity she would like to convey (i.e., what kind of L2 user she would like to become). Excerpt 28 illustrates the connection Tina sees between improvement in her Japanese and her ability to express herself better. As for L2 identity, we have seen in Excerpt 14 (repeated below as Excerpt 29) that Tina wants to become (and to be perceived as) an L2 user of native-like proficiency.

Excerpt 28

*Tina: I had a real, **it was really nice**, like I really do feel like my, at least **my Japanese writing, has improved**, and so that's why seriously, I know I keep saying it but I really want to like continue writing...**I feel now that I can express a little better my, like what I'm thinking or my feelings**, but I want more practice with it. So, I'll keep on writing.*

(Tina: Interview 2)

Excerpt 29

*Tina: I know, like, it made me want to write more, especially when I found that I was **improving** like when the last conference we had last year. She said all my particles usage was correct. **That was really nice**, and so I don't want to stop studying Japanese...*

Dave: So what's your ultimate goal? Where are you goin'?

Tina: As far as I can go, man. I want to keep getting better....I want to sound Japanese. Some people look at me and say 'Did a Japanese write this?' That's what I want. It's probably going to take me the rest of my life to get it like that, but.... (Tina: Focus Group)

Felix. Though not as strongly as Tina did, Felix also perceived his Japanese improvement from the researcher/teacher's comment as shown in Excerpt 30 below. These findings suggest that the teacher's recognition of the learner's improvement can be a significant source for the learner to perceive language learning. The two learners' accuracy improvement was evident to me because I kept the record of what grammar they had difficulty controlling in my field notes. However, for the learners, it might not be so evident or they might not even remember, and thus they appreciated the researcher's recognition of improvement through which they realized or perceived improvements in their Japanese.

Excerpt 30

Dave: Is there anything in the interaction that you remembered that, any comments that you liked or disliked from her? ... Did anything stick out from any of your conference?

Tina: Only good stuff. I don't remember anything that I felt like I disliked.

Felix: uhm... she told me that my writing was more... adult like recently which I liked because that was one of my goals and so and she would tell me like when I was progressing more in a specific way so I liked hearing that because that allowed me to judge myself. (Felix: Focus Group)

5.2.2 *Self-realization of increased competence (Felix)*

Felix made several comments which showed that he felt the improvement in his Japanese proficiency, though Tina did not. The difference between the two can be explained by the difference of their proficiency levels. At the beginning of the data collection, while Tina was already proficient enough to express her thoughts and emotions, Felix did not have enough vocabulary, grammatical knowledge, and practice/experience to use his knowledge of Japanese (grammar and vocabulary) to express his thoughts on topics not introduced in the textbook he used. Thus, Felix had a lot more to learn and the improvement was more easily noticeable at his level.

In addition, Felix perceived learning through his realization of his increased competence that he now can do what he could not do before. Excerpt 31 shows one such example in which Felix explains how he gained control of the particle *no* which is used for prenominal modification to connect two nominals to form a nominal compound. Felix's account that he became "way better at using *no*" is supported by the accuracy rate change discussed in chapter 4 (see Figure 4. Accuracy rates for prenominal modification for Felix). His accuracy rate fluctuated greatly, between 50% and 100%, at the beginning of the data collection period. However, Felix began to use *no* consistently at a higher accuracy rate from Writing 8. The number of *no*'s used in each writing, though it was partly influenced by the content and it fluctuated, increased as well. In Writing 1, *no* was used four times, but 12 times in Writing 15, suggesting Felix's better control of this grammar.

Excerpt 31

And so you know we would go we would talk a lot about the particles for instance and uhm... and now I'm like way better at using "no" than I use to, and I got better at recognizing large

compound nominals. Before I would see like a single word and recognize it as a nominal but now I can see when a whole group of words is actually a whole big nominal. (Felix: Focus group)

Felix made similar comments several times reporting his realization of improved competence as seen in Excerpt 32 and 33 below. In Excerpt 32, Felix explains how he was able to fully understand a grammatical structure through a detailed explanation, and consequently he learned the grammar in question and stopped making mistakes. In Excerpt 33, we can see that Felix realized his improvement by noticing the expansion of his vocabulary and grammatical knowledge.

Excerpt 32

*And uhm... uh... especially at first, a lot of like grammar like... basic grammar I learned in class but that I had never truly understood and she, like, would explain it in depth uhm... like on the back of the page or on the side or something, and then... **and then I would stop making those mistakes after a while.*** (Felix: Focus group)

Excerpt 33

Dave: And you said your writing grew too. How do you know that?

Felix: uhmm... I have a much larger—somewhat larger repertoire of sort of phrases and vocabulary and grammatical structure and grammatical problem solving skills...

(Felix: Focus group)

5.2.3 Conclusion: Research question 3

In this subsection, we have seen that the main sources of learner perception of language learning were teacher's comments (e.g., verbal acknowledgement of improvement, praise on accuracy improvement, reduced amount of written corrections over time) and the learner's realization of his increased proficiency in terms of the size of his vocabulary, expressions, and

grammatical knowledge. We have also discussed that while lower proficiency learners' improvement is easily noticed by themselves, higher proficiency learners may not recognize their improvement. A pedagogical implication suggests the importance of teacher's acknowledgement of the learners' improvement, especially for more advanced learners.

6 CONCLUSION

This longitudinal study explored the impact of dialogic CF on L2 Japanese writing for language learning in terms of both linguistic and affective outcomes. Framed in Vygotsky's sociocultural theory, which, as remarked by Lantolf (2006), challenges many of the Cartesian dualisms in linguistics (e.g., implicit knowledge - explicit knowledge, learning - acquisition), the present study explored the impact of CF on L2 writing in terms of L2 learning without dichotomizing implicit CF and explicit CF and fracturing the dialectic unity of thought (i.e., cognition) and affect posited by Vygotsky (1987). With these goals in mind, this study therefore, investigated two learners' linguistic and affective responses to dialogic CF as inseparable variables of L2 learning using a case study approach. In addition, the present study endeavored to characterize the nature of the process of L2 learning based on the change in accuracy in writing, which has received little attention in the field. Studies that investigate the efficacy of CF on L2 writing typically interpret the lack of short-term accuracy improvement following the provision of CF as inefficacy of CF (e.g., Truscott and Hsu, 2008) seemingly without giving much consideration to the nature of the L2 developmental process. However, this interpretation is problematic in light of the findings of the present study which, in accordance with the claim of Vygotsky (1978), characterized the nature of the developmental process as a wave-like curve consisting of regressions and progressions, which suggest that regression or the lack of accuracy improvement does not necessarily mean the lack of L2 development or inefficacy of CF.

The significance of the present study lies in the fact that the current findings illustrated two fundamental sociocultural conceptualizations of cognitive development: (a) the dialectic relationship between cognition and affect; and (b) the revolutionary or emergent nature of

developmental process, in a manner relevant to those who are interested in CF on L2 writing, with concrete instances.

This chapter concludes the present study by summarizing the chief findings and their significance. The discussion then turns to pedagogical implications. Lastly, limitations are presented followed by suggestions for future research.

6.1 Review of Findings and Significance of the Study

6.1.1 Linguistic Outcomes

This study set out to answer three questions concerning the impact of dialogic CF on L2 Japanese writers' linguistic and affective outcomes. The first research question dealt with the nature of the process of cognitive development:

How do elementary and intermediate level English-speaking learners of Japanese as a foreign language (JFL) respond to dialogic CF with respect to use of Japanese grammatical structures?

The significance of this question is that it addressed the nature of the process of L2 development, which has received little attention in the discussion of the efficacy of CF on L2 writing. The vast majority of researchers have analyzed data under the assumption that development is gradual and upwardly linear. Thus, the lack of accuracy improvement in a new piece of writing following the provision of CF has generally been equated as the lack of the efficacy of CF (see Bitchener & Ferris 2012 for an overview). Though this assumption has been embraced without scrutiny by many CF L2 writing scholars, it is problematic from a Vygotskian perspective. Vygotsky (1978), who rejected the commonly held view of cognitive development as a 'gradual accumulation of separate changes' (p. 73), characterized the process of cognitive development using terms such as 'spasmodic,' 'revolutionary' (p. 73), or 'wave-like curves' (van der Veer and

Valsiner, 1991, p. 309).

In this study, the learners' response to dialogic CF was measured by: (a) accuracy rate of the target structures in new pieces of writing; and (b) changes in the quality of help they required for their self-error correction of the target structures. The result of the first measure was presented in line graphs. The accuracy curves that emerged from the quantitative analysis showed constant fluctuation consistent with Vygotsky's depiction of cognitive development as 'wave-like curves.' Furthermore, from the longitudinal data consisting of 15 writing samples, we were able to see that the waves eventually became smaller and stayed near the 100% accuracy level, indicating that the learners became able to consistently produce highly accurate writing despite the different topic and vocabulary they chose for each new pieces of writing.

The study also provides a nuanced account of L2 learning that cannot be observed through the learners' independent performance in writing. The evidence of L2 learning in interaction was analyzed by using Vygotsky's genetic method (1978) to trace how the researcher's help required by the learner during the self-correction task changed in terms of its explicitness, which was also presented numerically using the regulatory scale of Aljaafreh and Lantolf (1994). From this analysis, an emergent character of development emerged. That is, the learners underwent a phase in which they required very explicit help from the researcher/teacher, and after a while transitioned to independent production of accurate forms without going through a phase in which they required less explicit help from the researcher/teacher. This result, obtained through genetic method, also confirmed Vygotsky's (1978) characterization of cognitive development as emergent or revolutionary and not a 'gradual accumulation of separate changes' (p. 73).

Despite the proliferation of sociocultural approaches to L2 learning, Vygotsky's view of

the nature of the process of development has received little attention in the discussion of the efficacy of CF on L2 writing. Perhaps, the lack of attention to Vygotsky's view of development results from the fact that Vygotsky only described his view of development in a narrative without a systematic presentation of empirical data. The present study filled this research gap by quantitatively describing the longitudinal accuracy change in graphs depicting the changes of accuracy rate using descriptive statistics.

6.1.2 Affective Outcomes

The second research question dealt with learners' affective responses to dialogic CF:

How do elementary and intermediate level English-speaking JFL learners respond to dialogic CF with respect to inter- and intrapersonal issues such as affect-emotion and learner agency?

From the qualitative analysis, a portrait of the learner as a whole person and the feedback process as a complex social interaction emerged. They responded to dialogic CF with positive emotions, by enthusiastically exercising learner agency, and with increased motivation. Furthermore, the learners' narratives illustrated the dialectical relationship between cognition and emotion posited by Vygotsky (1978) in a concrete fashion, which lends support to Arnold's (2011) assertion that attention to affect is "a prerequisite for the optimal cognitive work of learning to take place" (p. 14).

These findings contribute new knowledge to the field by identifying affect as a factor that strongly influences the impact of teacher CF on L2 writing, and by revealing learners' emotional response to dialogic CF which has never been discussed in the few studies that operationalized CF on L2 writing as mediation (Aljaafreh & Lantolf, 1994; Lantolf & Aljaafreh, 1995; Erlam et al., 2013; Nassaji & Swain, 2001). The factors that seemed to engender positive affective

responses from the learners include: supportive atmosphere; teacher's confidence in the learner's ability; and perception of language learning. Learner's perception of language learning through teacher CF on L2 writing has been neglected in the field, yet through the qualitative analysis of the present study, it appeared as one of the important factors influencing the impact of CF because perception of language learning was found to be closely related to confidence and motivation. The third research question dealt with the learners' perception of language learning:

How do elementary and intermediate level English-speaking JFL learners perceive their own language learning through dialogic CF in their writing?

The two learners perceived their language learning to be robust (e.g., grammatical accuracy improvement) through dialogic CF. They perceived their own language learning from two sources: their own realization of their improved Japanese ability; and researcher/teacher's comments acknowledging their improvement of Japanese ability either in independent performance in writing or in interaction during the self-correction process. When the learners perceived their own language learning, it fueled their motivation because they felt that they were reducing the discrepancy between their actual L2 self and ideal L2 self.

6.2 Pedagogical Implications

The present study can provide several pedagogical implications for FL teachers of Japanese and other less commonly taught languages, which may be applicable to all FL teachers at an elementary level.

First, in contrast to the common belief among JFL teachers in the US (Hatasa, 2011), the findings suggest that writing meets the learner goal of communication and that writing in L2 Japanese is not too difficult for lower proficiency level (i.e., the level that is commonly achievable in a JFL context) learners if the genre is personal writing like journal entries and

especially if the text is created with Japanese word processing software. One of the most challenging aspects of writing in Japanese for JFL learners is Japanese orthography, especially kanji writing. However, with the computer technology, one can create Japanese text with just the ability to recognize kanji because Japanese words or phrases typed using the Roman alphabet (Romaji) will automatically be converted to some options in Japanese orthography, and one only needs to choose the right option. Both participants of the present study produced their writing using MS Word and it appeared that they were able to focus on composing and not be distracted or overwhelmed by orthography. Although the importance of personal writing has been downplayed in the contemporary L2 writing research conducted in ESL or EFL contexts, the personal/expressive writing genre is appropriate to JFL contexts in the US not only because it is feasible but also because it is relevant to JFL learners' goal of expressing themselves in Japanese. With the growing importance and popularity of digital written communication and increased opportunities for authentic communication with target-language users, inclusion of personal writing in the JFL curriculum, judging by the data collected for this dissertation, has the potential to engage collegiate students as adult learners and thus motivate them to continue their Japanese studies, which has been a major challenge in the JFL context in the U.S. (Hatasa, 2011).

Furthermore, inclusion of writing in JFL instruction is in line with the current discursive turn (Kramsch, 2006) in the field of foreign language education. Communicative language teaching (CLT), the most widely used elementary level FL pedagogical framework in the US, has recently been criticized for its focus on the development of transactional oral communicative abilities and hence lack of meaningful language use that involves thinking (Byrnes, 2006). As the appropriateness of CLT as a framework for FL study in higher education has been challenged,

written language has been gaining prominence in the FL curriculum as a way to engage students intellectually (Kramsch, 2006). For example, Allen and Paesani (2010) advocate literacy-based instruction which aims to develop academic literacy through reading authentic texts (e.g., novels) as one of the ways to make elementary level FL program relevant to intellectual missions in higher education. The findings of the present study suggest that inclusion of personal writing can also transform elementary level FL courses framed in CLT into courses that are more relevant to the needs of today's students who wish to communicate beyond the transactional level. Personal writing provided opportunities for the participants of the present study to practice constructing their L2 identity through writing the way they wanted, which, I believe, is one of the competencies required for communication in a global age.

A more universal pedagogical implication comes from the findings that highlighted the dialectic unity between cognition (i.e., processing the linguistic input) and affect. While the direct application of the time-consuming one-on-one writing conferences reported here may not be feasible in many FL contexts with a large class size, it is possible for FL teachers to consider learner affect in responding to their students writing whether the mode of the feedback is oral or written. For example, the teacher can respond to the student writing by providing content comment as an audience, by acknowledging improvement or strengths in the student's linguistic ability, and by providing encouraging comment.

Third, with respect to addressing linguistic errors, the findings revealed that one of the elements of the dialogic CF writing conference the participants appreciated most was the opportunity to receive grammar explanations on their errors. Once again, this is a time consuming practice that many language teachers may not be able to afford. In that case, perhaps mini-grammar lesson (Ferris, 2011), after the teacher read all of the students writing assignments

and identified a common error, can address the learner needs without stretching the limit of already overworked language teachers. Another highly appreciated element of the dialogic CF writing conference was the opportunity to talk about their writing so that the participants can accurately express themselves in writing with the teacher's help, which cannot be done through mini-lessons. To provide such help that is individualized and also ZPD sensitive (when dealing with grammatical errors), a teacher of a large class size can include a workshop class (Bitchener & Ferris, 2012) in which the teacher circulates among the students by spending a few minutes with individual students to provide dialogic CF while others work on some other task.

Lastly, regarding accuracy improvement, it would be helpful for language teachers to evaluate the effectiveness of their feedback practice in light of the nature of the L2 developmental process. Previous studies have reported numerous accounts in which language teachers experience frustration in the absence of upwardly linear improvement of accuracy after provisions of CF in L2 writing (e.g., Casanave, 2004). However, the current findings suggest, in accordance with Vygotsky's claim, that the process of L2 development follows a wave-like trajectory consisting of constant fluctuation. Having a realistic expectation in light of the nature of the developmental process would save teachers from getting discouraged by the lack of gradual and upwardly linear development in students' writing.

6.3 Limitations of the Present Study and Directions for Future Research

This study attempted to contribute to the understanding the value of CF in L2 writing with thick descriptions which came with an inevitable limitation. This study was a small scale case study with only two participants. I hope the thick description provided in this study will allow the readers to decide if the findings of this study are transferrable to their own context and population, but its findings need to be interpreted with caution. It is hoped that future studies

would continue this line of research to confirm the transferability of the findings of this study. Though this study is limited in the number of participants, the consistency of the present findings with the sociocultural view of L2 development suggests that this is a promising line of future research.

Another limitation involves the number of the target structures. This study focused on three target structures that English-speaking L2 learners typically have great difficulty controlling. However, more structures need to be examined to make a stronger claim on the linguistic outcomes of dialogic CF since it has been reported that not all error types (in English) are equally responsive to CF (Bitchener et al., 2005; Ferris, 1999, 2006).

6.4 Concluding Remarks

The discussion that surrounds the efficacy or impact of CF on L2 writing rarely views the learner as a whole person and thus do not encompass the voices of L2 learners. As a teacher who interacts with JFL learners as a person in a real-life context, and scholar looking to contribute new knowledge to the controversial error correction debate, I embarked on this study to discover the learners' perspectives and their roles in L2 learning through CF with an underlying sociocultural theoretical understanding of the learner as agent who "perceives, analyses, rejects or accepts solutions offered, makes decisions and so on" (Swain, 2006, pp. 100-101) in the feedback process. With its data-driven approach, this study offered concrete instances of the learner acting as a whole person with agency whose emotions are constantly activated in the feedback process, which in turn underscored the dialectical unity of cognition and affect-emotion in L2 learning. In addition, the findings suggest that dialogic CF, proposed by Aljaafreh and Lantolf (1994), is an operationalization of CF in L2 writing which facilitates L2 learning by

eliciting positive affect from the learners and scaffolding their L2 development in their ZPD through the provision of appropriate mediation.

Another chief finding of the present study comes from the documentation of the learners' accuracy change over one year using 15 new pieces of writing from which a characteristic of L2 development emerged. The accuracy curves presented in chapter 4 demonstrated wave-like curves consistent with the sociocultural understanding of development and in contrast to the common assumption of the field of CF in L2 writing which views L2 development as a gradual and linear process.

It is hoped that this study encourages JFL teachers in the U.S. to include self-expressive writing (e.g., journal) in instruction, and that it serves as an impetus for future research that investigates the role of affect in the feedback process in L2 writing.

REFERENCES

- Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal*, 78(4), 465–483.
- Allen, H. W., & Paesani, K. (2010). Exploring the Feasibility of a Pedagogy of Multiliteracies in Introductory Foreign Language Courses. *L2 Journal*, 2(1).
- Anton, M., & DiCamilla, F. (1998). Socio-cognitive functions of L1 collaborative interaction in the L2 classroom. *Canadian Modern Language Review*, 54(3), 314.
- Arnold, J. (2011). Attention to affect in language learning. *Anglistik: International Journal of English Studies*, 22(1), 11–22.
- Arnold, J., & Brown, H. D. (1999). A map of the terrain. In *Affect in language learning*. Cambridge, U.K.; New York, NY: Cambridge University Press.
- Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing*, 9(3), 227–257.
- Bates, E., & Goodman, J. C. (1999). On the emergence of grammar from the lexicon. In B. MacWhinney (Ed.), *The Emergence of Language* (pp. 29–80). Mahwah, NJ: Psychology Press.
- Beason, L. (2001). Ethos and error: How business people react to errors. *College Composition and Communication*, 53(1), 33–64.
- Belcher, D. (2012). Considering what we know and need to know about second language writing. *Applied Linguistics Review*, 3(1), 131–150.

- Berg, B. L. (2009). *Qualitative research methods for the social sciences*. Boston, MA: Allyn & Bacon.
- Bitchener, J. (2012). Written corrective feedback for L2 development: Current knowledge and future research. *TESOL Quarterly*, 46(4), 855–860.
- Bitchener, J., & Ferris, D. (2012). *Written corrective feedback in second language acquisition and writing*. New York, NY: Routledge.
- Bitchener, J., & Knoch, U. (2009). The relative effectiveness of different types of direct written corrective feedback. *System*, 37(2), 322–329.
- Bitchener, J., & Knoch, U. (2010). The contribution of written corrective feedback to language development: A ten month investigation. *Applied Linguistics*, 31(2), 193–214.
- Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. *Journal of Second Language Writing*, 14(3), 191–205.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bruton, A. (2009). Designing research into the effects of grammar correction in L2 writing: Not so straightforward. *Journal of Second Language Writing*, 18(2), 136–140.
- Bryman, A. (2012). *Social research methods* (4th ed.). New York, NY: Oxford University Press.
- Burns, N., & Grove, S. K. (2005). *The practice of nursing research: conduct, critique, and utilization* (5th ed.). St. Louis, MO: Elsevier.
- Byrnes, H. (2006). Perspectives. *The Modern Language Journal*, 90(2), 244–246.
- Canfield, J., & Wells, H. C. (1994). *100 ways to enhance self-concept in the classroom*. Boston, MA: Allyn and Bacon.

- Carnicelli, T. A. (1980). The writing conference: A one-to-one conversation. In T. R. Donovan & B. W. McClelland (Eds.), *Eight approaches to teaching composition* (pp. 101–157). Urbana, Ill: National Council of Teachers.
- Casanave, C. P. (2004). *Controversies in second language writing : dilemmas and decisions in research and instruction*. Ann Arbor, MI: University of Michigan Press.
- Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing*, 12(3), 267–296.
- Cohen, A. D., & Cavalcanti, M. C. (1990). Feedback on compositions: Teacher and student verbal reports. In B. Kroll (Ed.), *Second language writing: research insights for the classroom* (pp. 155–177). New York, NY: Cambridge University Press.
- Cole, M., & Scribner, S. (1978). Introduction. In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind in society : the development of higher psychological processes* (pp. 1–14). Cambridge, MA: Harvard University Press.
- Conrad, S. M., & Goldstein, L. M. (1999). ESL student revision after teacher-written comments: Text, contexts, and individuals. *Journal of Second Language Writing*, 8(2), 147–179.
- Cumming, A. (1998). Theoretical perspectives on writing. *Annual Review of Applied Linguistics*, 18, 61–78.
- Damasio, A. R. (2005). *Descartes' error: Emotion, reason, and the human brain*. New York, NY: Penguin Books.
- De Guerrero, M. C. M., & Villamil, O. S. (2000). Activating the ZPD: Mutual scaffolding in L2 peer revision. *The Modern Language Journal*, 84(1), 51–68.

- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (2nd ed.). New York, NY: McGraw-Hill Inc.
- Dewaele, J.-M. (2005). Investigating the psychological and emotional dimensions in instructed language learning: Obstacles and possibilities. *The Modern Language Journal*, 89(3), 367–380.
- Dewaele, J.-M. (2012). Affect and language teaching. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics*. Oxford, UK: Blackwell Publishing Ltd.
- Dewaele, J.-M., & Furnham, A. (1999). Extraversion: The unloved variable in applied linguistic research. *Language Learning*, 49(3), 509–544.
- Donato, R. (1994). Collective scaffolding in second language learning. In J. P. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research* (pp. 33–56). Norwood, NJ: Praeger.
- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: L. Erlbaum Associates.
- Dufeu, B. (1994). *Teaching myself*. New York, NY: Oxford University Press.
- Duff, P. (2008). *Case study research in applied linguistics*. New York, NY: Lawrence Erlbaum Associates.
- Duff, P. (2012). Identity, agency, and SLA. In S. M. Gass & A. Mackey (Eds.), *The Routledge handbook of second language acquisition* (pp. 410–426). New York, NY: Routledge.
- Duff, P. A. (2012). How to carry out case study research. In A. Mackey & S. M. Gass (Eds.), *Research methods in second language acquisition: a practical guide* (pp. 95–116). Malden, MA: Wiley-Blackwell.

- Duff, P. A. (2013). Case study. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics* (pp. 1–8). Oxford, UK: Blackwell Publishing Ltd.
- Ehrman, M. E. (1996). *Understanding second language learning difficulties*. Thousand Oaks, CA: Sage Publications.
- Ellis, K. (2000). Perceived teacher confirmation. *Human Communication Research*, 26(2), 264–291.
- Ellis, R. (1994). *The study of second language acquisition*. New York, NY: Oxford University Press.
- Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System*, 36(3), 353–371.
- Erlam, R., Ellis, R., & Batstone, R. (2013). Oral corrective feedback on L2 writing: Two approaches compared. *System*, 41(2), 257–268.
- Evans, N. W., James Hartshorn, K., & Strong-Krause, D. (2011). The efficacy of dynamic written corrective feedback for university-matriculated ESL learners. *System*, 39(2), 229–239.
- Fathman, A., & Whalley, E. (1990). Teacher response to student writing: Focus on form versus content. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 178–190). New York, NY: Cambridge University Press.
- Ferris, D. R. (1997). The influence of teacher commentary on student revision. *TESOL Quarterly*, 31(2), 315–339.
- Ferris, D. R. (1999). The case for grammar correction in L2 writing classes: A response to Truscott (1996). *Journal of Second Language Writing*, 8(1), 1–11.

- Ferris, D. R. (2002). *Treatment of error in second language student writing*. Ann Arbor, MI : University of Michigan Press.
- Ferris, D. R. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In *Feedback in second language writing: Contexts and issues* (pp. 81–104). New York, NY: Cambridge University Press.
- Ferris, D. R. (2011). *Treatment of error in second language student writing* (2nd ed.). Ann Arbor, MI: University of Michigan Press ELT.
- Ferris, D. R., & Hedgcock, J. (2014). *Teaching L2 composition: Purpose, process, and practice* (3rd ed.). New York, NY: Routledge.
- Frawley, W., & Lantolf, J. P. (1985). Second language discourse: A Vygotskyan Perspective. *Applied Linguistics*, 6(1), 19–44.
- Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second-language learning*. Rowley, MA: Newbury House.
- Gardner, Robert C. (2001). Integrative motivation and second language acquisition. In Z. Dörnyei & R. W. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 1–19). Honolulu, HI: Second Language Teaching & Curriculum Center, University of Hawaii' at Mānoa.
- Garrett, P., & Young, R. F. (2009). Theorizing affect in foreign language learning: An analysis of one learner's responses to a communicative Portuguese course. *The Modern Language Journal*, 93(2), 209–226.
- Gass, S. M., & Mackey, A. (2000). *Stimulated recall methodology in second language research*. Mahwah, NJ: Routledge.

- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, ILL: Aldine.
- Guba, E. G. (1978). *Toward a methodology of naturalistic inquiry in educational evaluation*. Los Angeles, CA: UCLA Graduate School of Education.
- Hakuta, K. (1976). A case study of a Japanese child learning English as a second language. *Language Learning*, 26(2), 321–351.
- Halstead, I. (1975). Putting error in its place. *Journal of Basic Writing*, 1, 72–86.
- Han, Y., & Hyland, F. (2016). Oral corrective feedback on L2 writing from a sociocultural perspective: A case study on two writing conferences in a Chinese university. *Writing & Pedagogy*, 8(3), 433–459.
- Hartshorn, K. J., & Evans, N. W. (2015). The journal of response to writing: A response to a professional need. *Journal of Response to Writing*, 1(1).
- Hatasa, Y. A. (2011). L2 writing instruction in Japanese as a foreign language. In T. Cimasko & M. Reichelt (Eds.), *Foreign language writing instruction: Principles and practices* (pp. 98–117). Anderson, SC: Parlor Press.
- Heron, J. (1989). *The facilitators' handbook*. London, UK: Kogan Page.
- Higgs, T. V. (1984). *Teaching for proficiency: the organizing principle*. Lincolnwood, IL: National Textbook Co.
- Horowitz, D. (1986). Process, not product: Less than meets the eye. *TESOL Quarterly*, 20(1), 141–144.
- Horwitz, E. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, 21, 112–126.

- Hyland, F. (1998). The impact of teacher written feedback on individual writers. *Journal of Second Language Writing*, 7(3), 255–286.
- Hyland, F. (2010). Future directions in feedback on second language writing: Overview and research agenda. *International Journal of English Studies*, 10(2), 171–182.
- Hyland, F., & Hyland, K. (2001). Sugaring the pill: Praise and criticism in written feedback. *Journal of Second Language Writing*, 10(3), 185–212.
- Imai, Y. (2010). Emotions in SLA: New insights from collaborative learning for an EFL classroom. *Modern Language Journal*, 94(2), 278–292.
- Iwasaki, N. (2006). Processes in L2 Japanese sentence production. In M. Nakayama, R. Mazuka, Y. Shirai, & P. Li (Eds.), *The Handbook of East Asian Psycholinguistics* (Vol. 2, pp. 158–172). New York, NY: Cambridge University Press.
- Jenkins, J. (2014). *English as a lingua franca in the international university: The politics of academic English language policy*. New York, NY: Routledge.
- Jorden, E. H., & Walton, A. R. (1987). Truly foreign languages: Instructional challenges. *The Analysis of the American Academy*, 490, 110–124.
- Kim, E. Y. J. (2015). “I don’t understand what you’re saying!”: Lessons from three ESL writing tutorials. *Journal of Response to Writing*, 1(1).
- Kondo, K. (1999). Motivating bilingual and semibilingual university students of Japanese: An analysis of language learning persistence and intensity among students from immigrant backgrounds. *Foreign Language Annals*, 32(1), 77–88.
- Kramsch, C. (2006). From Communicative Competence to Symbolic Competence. *The Modern Language Journal*, 90(2), 249–252

- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. New York, NY: Pergamon.
- Lalande, J. F. (1982). Reducing composition errors: An experiment. *Modern Language Journal*, 66(2), 140–149.
- Lantolf, J. P. (2000). Introducing sociocultural theory. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 1–26). New York, NY: Oxford University Press.
- Lantolf, J. P. (2005). Sociocultural and second language learning research: An exegesis. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 335–353). Mahwah, NJ: L. Erlbaum Associates.
- Lantolf, J. P. (2006). Sociocultural theory and L2: State of the art. *Studies in Second Language Acquisition*, 28(01), 67–109.
- Lantolf, J. P. (2012). Sociocultural theory: A dialectical approach to L2 research. In S. M. Gass & A. Mackey (Eds.), *The Routledge handbook of second language acquisition* (pp. 57–72). New York, NY: Routledge.
- Lantolf, J. P., & Aljaafreh, A. (1995). Second language learning in the zone of proximal development: A revolutionary experience. *International Journal of Educational Research*, 23(7), 619–632.
- Lantolf, J. P., & Frawley, W. (1984). Second language performance and Vygotskian psycholinguistics: Implications for L2 instruction. In A. Manning, P. Martin, & K. McCalla (Eds.), *The tenth LACUS forum 1983* (pp. 425–440). Columbia, SC: Hornbeam Press.

- Lantolf, J. P., & Pavlenko, A. (2001). (S)econd (L)anguage (A)ctivity theory: Understanding second language learners as people. In M. Breen (Ed.), *Learner contributions to language learning* (1st ed., pp. 141–158). New York, NY: Routledge.
- Lantolf, J. P., & Poehner, M. E. (2008). Introduction to sociocultural theory and the teaching of second languages. In J. P. Lantolf & M. E. Poehner, *Sociocultural theory and the teaching of second languages* (pp. 1–32). London ; Oakville, CT : Equinox Publishing.
- Lantolf, J. P., & Poehner, M. E. (2014). *Sociocultural theory and the pedagogical imperative in L2 education : Vygotskian praxis and the research/practice divide*. New York, NY: Routledge.
- Lantolf, J. P., & Thorne, S. L. (2007). Sociocultural theory and second language learning. In B. VanPatten & J. Williams, *Theories in second language acquisition : an introduction* (pp. 201–224). Mahwah, NJ: Lawrence Erlbaum Associates.
- Lantolf, J. P., Thorne, S. L., & Poehner, M. E. (2014). Sociocultural theory and second language development. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (2nd ed., pp. 207–226). New York, NY: Routledge.
- Larsen-Freeman, D. (1997). Chaos/complexity science and second language acquisition. *Applied Linguistics*, 18(2), 141–165.
- Larsen-Freeman, D. (2002). Language acquisition and language use from a chaos/complexity perspective. In C. Kramsch (Ed.), *Language acquisition and language socialization: Ecological perspectives* (pp. 33–46). New York, NY: Bloomsbury Academic.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York, NY: Cambridge University Press.

- Lee, I. (2008). Student reactions to teacher feedback in two Hong Kong secondary classrooms. *Journal of Second Language Writing, 17*(3), 144–164.
- Lee, I. (2014a). Feedback in writing: Issues and challenges. *Assessing Writing, 19*, 1–5.
- Lee, I. (2014b). Revisiting teacher feedback in EFL writing from sociocultural perspectives. *TESOL Quarterly, 48*(1), 201–213.
- Lidz, C. S. (1991). *Practitioner's guide to dynamic assessment*. New York, NY: The Guilford Press.
- Liu, Q., & Brown, D. (2015). Methodological synthesis of research on the effectiveness of corrective feedback in L2 writing. *Journal of Second Language Writing, 30*, 66–81.
- Mahfoodh, O. H. A. (2017). “I feel disappointed”: EFL university students’ emotional responses towards teacher written feedback. *Assessing Writing, 31*, 53–72.
- Mahn, H. (2008). A dialogic approach to teaching L2 writing. In J. P. Lantolf & M. E. Poehner, *Sociocultural theory and the teaching of second languages* (pp. 115–138). Oakville, CT: Equinox Publishing.
- Mahn, H., & John-Steiner, V. (2002). The gift of confidence: A Vygotskian view of emotions. In G. Wells & G. Claxton (Eds.), *Learning for life in the 21st century: Sociocultural perspectives on the future of education* (pp. 46–58). Malden, MA: Wiley-Blackwell.
- Manchón, R. (2009). *Writing in foreign language contexts: Learning, teaching, and research*. Buffalo, NY: Multilingual Matters.
- Manchón, R. (2011a). The language learning potential of writing in foreign language contexts: Lessons from research. In T. Cimasko & M. Reichelt (Eds.), *Foreign language writing instruction: Principles and practices* (pp. 44–64). Anderson, SC: Parlor Press.

- Manchón, R. (2011b). Writing to learn the language: Issues in theory and research. In R. Manchón (Ed.), *Learning-to-write and writing-to-learn in an additional language* (pp. 61–82). Philadelphia, PA: John Benjamins Pub. Co.
- Manchón, R. M., & Roca de Larios, J. (2007). Writing-to-learn in instructed language learning contexts. In E. A. Soler & M. P. S. Jordà (Eds.), *Intercultural language use and language learning* (pp. 101–121). Netherlands: Springer.
- Manchon, R. M., & Roca de Larios, J. (2011). Writing to learn in FL contexts: Exploring learners' perceptions of the language learning potential of L2 writing. In R. M. Manchón (Ed.), *Learning-to-write and writing-to-learn in an additional language* (pp. 181–207). Philadelphia, PA: John Benjamins Publishing Company.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education: Revised and expanded from case study research in education* (2nd Revised & Expanded edition). San Francisco, CA: Jossey-Bass.
- Mori, J. (2004). Negotiating sequential boundaries and learning opportunities: A case from a Japanese language classroom. *The Modern Language Journal*, 88(4), 536–550.
- Mustafa, R. F. (2012). Feedback on the feedback: Sociocultural interpretation of Saudi ESL learners' opinions about writing feedback. *English Language Teaching*, 5(3), 3–15.
- Nassaji, H., & Swain, M. (2000). A Vygotskian perspective on corrective feedback in L2: The effect of random versus negotiated help on the learning of English articles. *Language Awareness*, 9(1), 34–51.
- National Virtual Translation Center. (2007). Language learning difficulty for English speakers. Retrieved from <http://www.nvtc.gov/lotw/months/november/learningExpectations.html>

- Ohta, A. S. (2000). Re-thinking interaction in SLA: Developmentally appropriate assistance in the zone of proximal development and the acquisition of L2 grammar. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (1st ed., pp. 51–78). New York, NY: Oxford University Press.
- Ohta, A. S. (2001). *Second language acquisition processes in the classroom: Learning Japanese*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Omaggio Hadley, A. O. (2001). *Teaching language in context* (3rd ed.). Boston, MA: Heinle & Heinle.
- Ortega, L. (2012). Epilogue: Exploring L2 writing–SLA interfaces. *Journal of Second Language Writing*, 21(4), 404–415.
- Panksepp, J. (1998). *Affective neuroscience : the foundations of human and animal emotions*. New York, NY: Oxford University Press.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Pavlenko, A., & Dewaele, J.-M. (Eds.). (2004). Languages and emotions: A crosslinguistic perspective. *Journal of Multilingual and Multicultural Development*, 25, 2–3.
- Pienemann, M. (1989). Is language teachable? Psycholinguistic experiments and hypotheses. *Applied Linguistics*, 10, 52–79.
- Poehner, M. E. (2005). *Dynamic assessment of oral proficiency among advanced L2 learners of French* (Unpublished Ph.D. dissertation). Pennsylvania State University, United States.
- Robb, T., Ross, S., & Shortreed, I. (1986). Salience of feedback on error and its effect on EFL writing quality. *TESOL Quarterly*, 20(1), 83–95.

- Samimy, K., & Tabuse, M. (1992). Affective variables and a less commonly taught language: A study in beginning Japanese classes. *Language Learning*, 42, 377–398.
- Schumann, J. H. (1997). *The neurobiology of affect in language learning*. Malden, MA: Wiley-Blackwell.
- Semke, H. (1984). The effects of the red pen. *Foreign Language Annals*, 17, 195–202.
- Sheen, Y., Wright, D., & Moldawa, A. (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System*, 37(4), 556–569.
- Shintani, N., Ellis, R., & Suzuki, W. (2014). Effects of written feedback and revision on learners' accuracy in using two English grammatical structures. *Language Learning*, 64(1), 103–131.
- Stake, R. E. (1978). The case study method in social inquiry. *Educational Researcher*, 7(2), 5–8.
- Stake, R. E. (1994). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Stevick, E. W. (1980). *Teaching languages: A way and ways*. Newbury House Publishers.
- Stevick, E. W. (1996). *Memory, meaning & method: A view of language teaching*. Boston, MA: Heinle & Heinle.
- Storch, N., & Wigglesworth, G. (2010). Learners' processing, uptake, and retention of corrective feedback on writing: Case studies. *Studies in Second Language Acquisition*, 32(Special Issue 02), 303–334.
- Strauss, A. L. (1987). *Qualitative analysis for social scientists*. New York, NY: Cambridge University Press.

- Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage Publications.
- Swain, M. (2006). Linguaging, agency and collaboration in advanced second language proficiency. In H. Byrnes (Ed.), *Advanced language learning: The contribution of Halliday and Vygotsky* (pp. 95–108). New York, NY: Continuum.
- Swain, M., & Lapkin, S. (1998). Interaction and second language learning: Two adolescent French immersion students working together. *The Modern Language Journal*, 82(3), 320–337.
- Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, 46(2), 327–369.
- Truscott, J., & Hsu, A. Y. (2008). Error correction, revision, and learning. *Journal of Second Language Writing*, 17(4), 292–305.
- Unger, J. M., Lorish, F. C., Noda, M., & Wada, Y. (1993). A framework for introductory Japanese language curricula in American high schools and colleges. Retrieved from <http://eric.ed.gov/?id=ED365092>
- Ushioda, E., & Dörnyei, Z. (2009). Motivation, language identities and the L2 self: A theoretical overview. In Zoltán Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 1–8). Buffalo, NY: Multilingual Matters.
- Van Beuningen, C. (2010). Corrective feedback in L2 writing: Theoretical perspectives, empirical insights, and future directions. *International Journal of English Studies*, 10(2), 1–27.

- Van Beuningen, C., De Jong, N. H., & Kuiken, F. (2012). Evidence on the effectiveness of comprehensive error correction in second language writing. *Language Learning*, 62(1), 1–41.
- Van Beuningen, C. G., De Jong, N. H., & Kuiken, F. (2008). The effect of direct and indirect corrective feedback on L2 learners' written accuracy. *ITL Review of Applied Linguistics*, 156, 279–296.
- van Compernelle, R. A., & Williams, L. (2013). Sociocultural theory and second language pedagogy. *Language Teaching Research*, 17(3), 277–281.
- van der Veer, R., & Valsiner, J. (1991). *Understanding Vygotsky: A quest for synthesis* (Vol. x). Malden, MA: Blackwell Publishing.
- van Lier, L. (2004). *The ecology and semiotics of language learning: A sociocultural perspective*. Boston, MA: Kluwer Academic.
- van Lier, L. (2005). Case study. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 195–208). Mahwah, NJ: L. Erlbaum Associates.
- van Lier, L. (2008). Agency in the classroom. In J. P. Lantolf & M. E. Poehner, *Sociocultural theory and the teaching of second languages* (pp. 163–188). Oakville, CT: Equinox Publishing.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1987). Thinking and speech (Transl. N Minick). In R. W. Rieber & A. S. Carton (Eds.), *The collected works of L. S. Vygotsky: Problems of general psychology, including the volume thinking and speech*. New York, NY: Plenum.

- Vygotsky, L. S., & Luria, A. R. (1930). *Etjudy po istorii povedenija. Obez'jana. Primitiv. Rebenok*. Moscow-Leningrad: Gosudarstvennoe Izdatel'stvo.
- Watanabe, Y. (2004). *Collaborative dialogue between ESL learners of different proficiency levels : linguistic and affective outcomes* (Unpublished master's thesis). University of Toronto, Toronto, Canada.
- Wells, G. (1998). Using L1 to master L2: A response to Anton and DiCamilla's "Socio-cognitive functions of L1 collaborative interaction in the L2 classroom." *Canadian Modern Language Review*, 54(3), 343.
- Wells, G. (1999). *Dialogic inquiry: Towards a socio-cultural practice and theory of education*. New York: Cambridge University Press.
- Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.
- Wertsch, J. V. (2007). Mediation. In H. Daniels, M. Cole, & J. V. Wertsch, *The Cambridge companion to Vygotsky* (pp. 178–192). New York, NY: Cambridge University Press.
- Williams, M. (1994). Motivation in foreign and second language learning: an interactive perspective. *Educational and Child Psychology*, 11(2), 77–84.
- Yigitoglu, N., & Reichelt, M. (2012). Teaching Turkish and Turkish-language writing in the U.S.: A descriptive report. *Journal of Second Language Writing*, 21(1), 71–75.
- Young, R. F., & Miller, E. R. (2004). Learning as changing participation: Discourse roles in ESL writing conferences. *The Modern Language Journal*, 88(4), 519–535.

APPENDICES

Appendix A

Georgia State University
Department of World Languages and Cultures
Informed Consent

Title: The efficacy of error correction through one-to-one writing conferences
Principal Investigator: Mizuki Mazzotta

I. Purpose:

You are invited to participate in a research study. The purpose of the study is to investigate the efficacy of second language written error correction when provided in a one-to-one conference setting. You are invited to participate because you are an English-speaking adult learner of Japanese who is proficient enough to write a paragraph in Japanese. A total of 10 participants will be recruited for this study. Participation will require 13 hours of your time over 13 weeks (Phase 1), and additional 8 hours over 10 weeks (Phase 2).

II. Procedures:

If you decide to participate, you will participate in writing conferences (tutoring sessions) with the investigator who will guide you to correct errors in your writing. You will prepare a paragraph length Japanese text spending about 30 minutes at home before each conference. Conferences will be held once a week for 30 - 60 minutes in the investigator's office at the time that is convenient for you. There will be two interviews in each phase which will last approximately 30 minutes. The study will last for one year and you will spend approximately 21 hours over 23 weeks. Your interaction with the investigator will be audio and videotaped for analysis.

III. Risks:

In this study, you will not have any more risks than you would in a normal day of life.

IV. Benefits:

Participation in this study may benefit you personally. Error correction you receive on your writing may promote your second language development. Overall, we hope to gain information about the effectiveness of written error correction when provided in a one-to-one conference setting.

V. Voluntary Participation and Withdrawal:

Participation in research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may stop participating at any time. Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

Appendix B

Semi-structured Interview Questions for the First Interview

1. What do you hope to gain out of this writing tutoring study?
2. What do you think are your weaknesses in your Japanese in general, and in your Japanese writing in particular?
3. What do you intend to do with your Japanese skills?

Appendix C

Semi-Structured Interview Questions for the Second Interview

1. Did you get what you wanted from this study through writing conferences?
2. Do you think you learned something from participating in writing conferences, and if so, how did you learn them?
 - Can you elaborate on that?
 - How did you feel about the way how I provided grammar error correction? I did not tell what was wrong at first, but instead I tried to elicit your self-correction – How did you feel about that?
 - Was there any type of comment from me, or interactions that you particularly enjoyed or disliked?
 - I provided positive comments on your writing. Did that make any difference for your motivation to write in Japanese, or did that help you learn Japanese in any way?
3. Do you think writing conference was an effective way to improve your Japanese writing? How about learning Japanese in general?
 - How has your confidence and motivation for writing in Japanese changed after participating in this study?

Appendix D

Semi-Structured Focus Group Interview Questions

Note: The research assistant was instructed to ask the same questions as in the second interview (to check if the participants change their responses when asked by a different person) as well as additional questions during the focus group interview. Below are the questions the research assistant, Dave Chiesa, prepared for the interview after I explained the aims of the focus group interview to him.

1. Could you please tell me a little bit about your Japanese language learning experience?
When did you start? Why did you decide to study this language?
2. Recently, Mizuki asked each of you to participate in a writing conference. Were you surprised? Shocked? Do you know why you think you were chosen? What were your expectations about yourself, Mizuki, and the interaction?
3. Did you have any specific or clear goals in mind before? Just curious – did you write the goals down at all?
4. When did your conferences with Mizuki begin?
5. What were some of your favorite topics to write about? Least favorite? Easy? Most difficult?
6. What are some specific grammatical structures that you had trouble with?
7. Can you please walk me through the process of your interaction with Mizuki?
8. Did you get what you wanted from this study through writing conferences?
9. Do you think you learned something from participating in writing conferences, and if so, how did you learn them?

- Can you elaborate on that?
- How did you feel about the way how Mizuki provided grammar error correction? Would you have liked more direct feedback?
- Was there any type of comment from Mizuki, or interactions that you particularly enjoyed or disliked?
- Mizuki provided positive comments on your writing. Did that make any difference in your interaction with her; do you now feel more motivated to write in Japanese, or did that help you learn Japanese in any way?

10. Do you think writing conference was an effective way to improve your Japanese writing? How about learning Japanese in general?

11. How has your confidence and motivation for writing in Japanese changed after participating in this study?

12. Do you have any recommendations for Mizuki when she works with other students? Please be as specific as possible.

13. Do you have any last comments or concerns about writing conferences?

Appendix E

Sample Field Notes

	Felix - Writing Conference 1 : September 12 Topic: Tiisai mizikai monogatari
Grammar forms	* -o dekiru, *Adj -i ni Verb (Adj-ku + Nom)
Language learning (tutor's and tutee's perception)	<p>We talked about the verb “dekiru” and I explained that this is called affective predicate or double –ga predicate which requires its object to be marked by ga. We went over examples of affective predicates and I assumed he understood. However, when he emailed me his revision, he wrote “revision –o dekimasita” repeating the same particle error that we just talked about.</p> <p>I used to get discouraged when something like this happened and thought “I just explained this grammar. Was my student listening to me/looked at my corrections?” and eventually thought that grammar error correction was useless.</p> <p>However, after I conducted my course project on the efficacy of Vygotskyan dialogic CF, I do not feel discouraged nor consider this repetition of the same grammatical error as evidence of non-learning. Rather, my understanding is that L2 development is a very subtle and slow process which may not necessarily observable in students' independent performance.</p> <p>I am interested to see how long it takes for Felix to internalize this grammar.</p> <p>→ Yes! Felix internalized this grammar on October 17. It took him about one month to use this grammar correctly and independently.</p>
Learner affect (motivation, confidence)	It appeared that Felix was not unmotivated or discouraged by my error corrections. He participated in this writing conference actively by asking further questions, and I got an impression that he is truly interested in Japanese grammar.

Tutor's difficulties in providing CF	Providing dialogical CF was not difficult.
Other	<p>Felix is interested in grammar. He asks questions that is not directly related to the grammar correction I provide. He wants to know difference between similar expressions (zibun and zibun hitori)</p> <p>→ Agency: Felix is not passive in learning Japanese grammar. He asks many questions regarding grammar, and he is trying to find out how his idea could be expressed in Japanese. He does not simply accept my suggestion, but by asking questions, he tries to figure out if what I suggested would fit what he wanted to say, OR if there is a way to conserve the grammatical structure he initially chose and say what he wanted to say. This pattern continues in the subsequent conferences as well.</p> <p>→ Given the observation above, I imagine that Felix would have been unhappy to just received written CF without having a chance to discuss it with his teacher. Also, he would not have been able to find satisfactory answer to his questions from grammar books or internet because it is about the entire sentence, and not about one small part (e.g. conjugation, or tense) of grammar.</p> <p>Felix wrote about his short visit to his father in his composition. It was short (7 lines), but he created a nice title (Tiisai mizikai monogatari) which made his short essay look like a short story. I think Felix is a good writer in his L1 (Eng) and the skill is transferring to his L2 (JPN). When I asked, Felix said that he use to enjoy writing, but now he is too busy with his studies and he rarely write (except for assignments).</p>
Utilization of feedback	<p>Not 100%</p> <p>Two errors were unchanged in his revision (wa, distal style). Was he unable to read my handwriting, or he was just careless and not paid enough attention?</p>

Appendix F

Codebook

Name	Sources	References	Description
Appropriation or Misunderstanding	3	4	Any comments that relate to teacher appropriation of the learner's writing, or any learner comment that relates to the issue of misunderstanding (i.e., being misunderstood by a reader).
Conceptual Learning	2	2	Observations by the researcher regarding how conceptual learning (explanation of Japanese grammar beyond the surface level phenomenon, such as syntactic structure) led the learners to acquire Japanese grammatical structures.
Dialectic Cognition Affect	3	5	Any comments from learners that illustrate the dialectic unity of cognition (i.e., acquisition of L2 grammar) and affect (anxiety, confidence, motivation, and other emotions).
Factors Helpful for Learning	5	37	Learners' description of what was helpful for their L2 Japanese learning.
Feedback_Content	3	4	Learners' description of how they felt about the researcher/teacher's comment on the content of their writing.
Feedback_Language	1	1	Participants' comments regarding the (corrective) feedback they received on language (i.e., grammar, vocabulary, sentence structure, etc.).
Goals, Desires, Expectations	3	29	Learners account of what they expected from participating in the writing conferences, and/or their goals and desires as an L2 Japanese writer.
Improvement_Acknowledged	1	2	Learners' comment regarding the teacher's acknowledgement on their accuracy or general writing improvement.
Improvement_Percieved	3	58	Learners' comment on their L2 Japanese learning in general and accuracy improvement
<i>Grammar</i>	3	16	Learners' perception of L2 development with respect to grammar
<i>Vocabulary</i>	2	5	Learners' perception of vocabulary learning through writing conferences

Interpersonal Factors	2	14	Any comments from learners relating to how interpersonal factors influenced their L2 learning during writing conferences both negatively and positively.
L2 writing as self-expression	3	12	Comments from the participants explaining how they perceive their L2 Japanese writing which expresses that it is not mere language learning exercise. Examples - L2 writing is personal, it is a means of expressing one's feelings, ideas, etc.
Learner Affect	5	107	Learners' comments regarding how they felt about the writing conferences and the feedback they received during the conferences.
<i>Anxiety</i>	3	9	Any comments from the learners regarding how anxiety influenced their learning during this study, and also in the past.
<i>Confidence</i>	4	8	Any comments from learners that relates to how participation in this study changed their confidence as L2 Japanese learners.
<i>Intrinsic Motivation</i>	5	18	Learners' comments regarding their intrinsic motivation and how dialogic CF and the whole writing conference participation increased/decreased their motivation. Key phrases: I want to/wanna, it motivates me, I am motivated, etc.
<i>Positive Emotion</i>	5	38	Learners' comments about (or mention of) their positive emotion experienced during (or as a result of receiving) dialogic CF. Key phrases: I like/liked, I am happy, I am glad, I enjoyed, It was fun, It was nice, It felt good, I feel good, etc.
<i>Praise</i>	3	7	Learners' comments regarding how praise (or compliments) provided by the teacher/researcher influenced their L2 learning through writing, and the way they feel about L2 Japanese writing and themselves.
Supportive atmosphere	5	11	Learners' comments that relate to how receiving encouragement and supportive comments from the teacher/researcher influenced their L2 learning experience through writing conferences/dialogic CF, and also how

			they felt after receiving the teacher's supportive/encouraging feedback/comments.
Learner Agency (Volitional tendency)	5	32	Comments from the learner that illustrate the learner as agent, who “perceives, analyses, rejects or accepts solutions offered, makes decisions and so on” (Swain, 2006, pp. 100-101). Sociocultural theory understands agency as “not simply an individual character trait or activity, but a contextually enacted way of being in the world” (van Lier 2008, p. 163).
<i>Autonomy</i>	3	10	Learners' perception/comments regarding how being autonomous contributed to their L2 Japanese learning
<i>Initiative & Active participation</i>	4	8	Learners' comments on their active participation (or their initiative) in the self-correction and dialogic CF process.
Learning in ZPD	2	2	Learners' comments that relates to how learning in his/her ZPD facilitated his/her learning of L2 Japanese. Also, comments regarding (in)appropriate mediation, and individual attention.
Recommendation from Ss	1	4	Recommendations or suggestions from the participants to the teacher/researcher.