

Chapter 5 : Phase 2 - Sociocultural SLA Research

Introduction

In this chapter, I introduce the key concepts in sociocultural theory, and relate them to feedback research in SLA.⁵⁴⁾ First, I illustrate the notions of mediated agency and the zone of proximal development, and then review feedback research conducted within the sociocultural SLA framework. In order to translate the notion of recast, which is a product of cognitive-interactionist SLA, into something applicable in sociocultural SLA, I provide an overview of feedback research in SLA. This brief overview highlights the characteristic differences and similarities of feedback in sociocultural SLA and SLA at large. The summary provides a new framework in which the recast is placed for sociocultural analysis.

Mediated Agency and the Zone of Proximal Development

Sociocultural theory accounts for human mental functioning by positing that an individual's internal mental activities have their origins in social life (Vygotsky, 1987). According to Vygotsky (1978), children learn and "grow into the intellectual life of those around them" (p.88) through social interaction with adults or more capable peers. This does not mean that children's mental functions "somehow emerge out of participation in social" interaction (Wertsch, Tulviste, & Hagstrom, 1993, p.338). Rather, their internal activities are closely related to external activities. Human activity, whether physical or mental, is motivated by a need which is either biological (e.g., hunger) or culturally constructed (e.g., becoming literate in certain cultures) (Lantolf, 2000, p.8). Motivated by a need, an activity is

54) Wertsch's explanation and interpretation of Vygotsky's work was important for my understanding sociocultural theory.

directed to a specific objective. Human mental functioning, therefore, is situated in goal-oriented activity.

Through participating in social interaction within a goal-oriented activity, children master and appropriate the socially shared processes (e.g., the ways of thinking and doing): they gain the means to regulate their own action (Wertsch, 1998). The individual internalizes socially shared functioning through the mediation of semiotic tools. Language is the most powerful psychological tool for thinking (Vygotsky, 1987). Dialogue, that is language in use, mediates the individual's thoughts and actions. For example, we engage in self-dialogue when we must solve a difficult problem. Engaging in internal dialogue, we self-regulate our thinking and action. The individual is an agent, and his/her mental functioning is a purposeful and voluntary action mediated by semiotic tools (Vygotsky, 1987; Wertsch, 1998).

In sociocultural theory, learning is an active process in which the novice gains independence in regulating his/her own actions. Vygotsky considered self-regulation to be preceded by "other-regulation" through social dialogue in the zone of proximal development (ZPD). The ZPD is defined by Vygotsky (1978, p.86) as a child's "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." Although this definition assumes a child's cognitive development, the notion of a ZPD is applicable to learning at any age.⁵⁵⁾

Gaining independence in self-regulation is a mental action. In other words, learning is a mental action that is mediated by semiotic means. In particular, dialogues between individuals mediate their collaborative construction of a ZPD. Studies in child development adopting a 55) Nakamura (1998, 2004) contends that applying the notion of ZPD to a child's development of daily concepts is an expanded interpretation of Vygotsky's idea. According to Nakamura's interpretation, Vygotsky's discussion on learning within ZPD is limited to development of scientific concepts within a school education context.

sociocultural approach show that the adult provides the child with an appropriate level of verbal assistance in response to the child's current performance. Children first need adults' detailed verbal guidance to complete a task, but they gradually come to repeat these verbal instructions to themselves in order to complete the task. Children's task completion is initially mediated by adults' language use, but they eventually learn to mediate their own actions by using the socially provided language (Wertsch, 1980).

Adults' verbal guidance given to children as they jointly complete a task is assistance within the ZPD. Such assistance is often compared to "scaffolding" (Wood, Bruner, & Ross, 1976). Wood and his colleagues investigated the characteristics of adult-child interaction during a problem-solving task and validated six "scaffolding functions" that the adults could use to guide the children in successful task completion. The functions were (1) recruitment: drawing the novice's attention to the task; (2) reduction in degrees of freedom: simplifying or limiting the task demands; (3) direction maintenance: maintaining motivation and progress toward the goals of the task; (4) marking of critical features: calling the novice's attention to important aspects of the task; (5) frustration control: decreasing the novice's stress; and (6) demonstration: modeling the preferred procedures to achieve the goals (Donato, 1994; McCormick, & Donato, 2000; Wood et al., 1976). These functions are operationalized in the adults' language use, that is, dialogue. They "negotiate task definitions with novices, assess their level of competence, and determine what type of assistance they need to accomplish a particular part of the task" (McCormick & Donato, 2000, p.185).

All the scaffolding functions serve for forging a ZPD. Because mental functioning is action controlled by an individual, each individual may perceive and define the same concrete objects and events differently. In order for individuals to work collaboratively, they need to share their respective understandings of the objects and events. In other words, the expert and the novice in the ZPD interaction need to establish

intersubjectivity (Frawley, 1997; Wertsch, 1985), “a minimal level of shared situation definition” (Wertsch, 1985, p.161), in order for the expert to provide the novice with appropriate assistance for task completion within the ZPD. The primary stage for forging the ZPD is establishing intersubjectivity through verbal dialogue between individuals.

In sum, learning is a mental activity. This activity is further comprised of different actions such as achieving intersubjectivity, forging a ZPD, negotiating a current state of understanding, and collaboratively completing a task. Mental functioning in sociocultural theory is analyzed as action within a goal-oriented activity. According to the theory, the unit of analysis is “individual(s)-operating-with-mediational-means” (Wertsch et al., 1993, p.342). One mediational means used in learning is language. In order to understand the role and efficacy of feedback, of which the recast is an example, it is necessary to investigate what mediational function it serves in relation to the interlocutors’ activities within the context.

Feedback and Sociocultural SLA Research⁵⁶⁾

Feedback Within the ZPD

SLA researchers adopting the framework of sociocultural theory consider that effective feedback should be provided within a zone of proximal development (ZPD) (Aljaafreh & Lantolf, 1994; Nassaji & Swain, 2000; Ohta, 2000). As described earlier, the expert provides the novice

56) Affordance, an important concept relevant to sociocultural SLA, should have been discussed in this section. The concept was introduced to sociocultural SLA by van Lier (2000); adopting an ecological approach to SLA research, he defines an affordance as “a particular property of the environment that is relevant – for good or for ill – to an active, perceiving organism in that environment” (p.252). An affordance is an alternative to the notion of input available to learners in the given environment. (cf., Long, 1996). Unlike the concept of input, affordance allows the active actor to make use of the property (e.g., language) available in the given situation (e.g., teacher-learner dialogue). In this respect, recasts and other forms of feedback are affordances and opportunities for learning available to the active learners.

with assistance in the ZPD *in reaction to* the novice's current performance. Thus, the notion of feedback within sociocultural SLA is broad; the researchers view more than the linguistic characteristics of feedback. They tend to study the role of the teacher's dialogic actions for educational significance, namely creating and sustaining the ZPD (e.g., McCormick & Donato, 2000; Nassaji & Cumming, 2000; Takahashi, Austin, & Morimoto, 2000; Verplaetse, 2000). Because teacher feedback does not exclusively refer to linguistic correction in sociocultural SLA, there are only a few empirical studies within sociocultural SLA that focus specifically on corrective feedback in the sense of cognitive-interactionist SLA (Aljaafreh & Lantolf, 1994; Nassaji & Swain, 2000; Ohta, 2000).

The studies by Aljaafreh and Lantolf (1994) and Nassaji and Swain (2000) focused on corrective feedback in the sense of cognitive-interactionist SLA through a sociocultural concept, the ZPD. Aljaafreh and Lantolf (1994) provided evidence that different teacher feedback strategies functioned to construct and maintain a ZPD. Adopting the same research design as Aljaafreh and Lantolf (1994) but with the addition of a comparison student, Nassaji and Swain (2000) showed that the student who received feedback through the scaffolding negotiation performed and maintained her learning better than a student who randomly received different types of feedback. In both studies, the researchers approached feedback through the teacher's verbal action instead of the linguistic characteristics of his utterances.

In Aljaafreh and Lantolf (1994), an ESL tutor provided individual L2 learners with corrective procedures in writing conference sessions. The tutor-tutee interaction revealed 12 levels of interactive "regulatory," or error correction, strategies; for instance, "tutor indicates that something may be wrong," "tutor narrows down the location of the error," "tutor provides clues to help the learner arrive at the correct form," "tutor provides the correct form" or "tutor provides some explanation for use of the correct form" (Aljaafreh & Lantolf, 1994, p.471). The tutor shifted along the implicit-explicit continuum of the regulatory verbal actions in

response to his dialogue with his students. The dialogue between the tutor and the learner determined “the [learner’s] level of development and the form of instruction involved” in the ZPD (Wertsch, 1985, pp.70-71). Along with the tutor’s shift, the students were also found to change their self-regulatory action over time. The students’ responsibility for solving the problem was less than the tutor’s at the explicit end but greater at the implicit end of the scale. The study showed that the students required the tutor’s assistance to identify and solve problems in earlier writing sessions, but the students gained the self-regulation necessary to solve similar problems over time.

A Framework for Recast Research Within Sociocultural SLA

In the regulatory scale in Aljaafreh and Lantolf (1994), recasts were not included; the recast is a feedback category based on linguistic characteristics whereas the regulatory scale was a feedback index based on agency. Each regulatory entry was a description of the tutor’s action using language. In order to understand the recast within the sociocultural framework, I need a comprehensive index of teacher feedback in an L2 classroom. I identified two types of feedback characteristics discussed in previous SLA research in general: the static aspects and dynamic aspects of feedback (Aljaafreh & Lantolf, 1994; Allwright, 1975; Chaudron, 1977; Long, 1977; Lyster & Ranta, 1997; Vigil & Oller, 1976).

Static characteristics of feedback

As shown in Chapter 2, the study of recasts was derived from cognitive-interactionist SLA in which the researchers primarily focus on and investigate language (i.e., linguistic input) in relation to the L2 learner’s language learning mechanisms. Some linguistically oriented SLA researchers contend a recast is negative evidence for the language learner (see pp.8-9); negative evidence provided in the practice of teaching and learning is called “feedback.”

The notion of feedback in the educational context, however, is

broader than “linguistic negative evidence.” Feedback in classroom-based research primarily refers to the teacher’s reactive behaviour to the learner’s performance (e.g., Allwright & Bailey, 1991; Chaudron, 1988; Lyster & Ranta, 1997). The teacher’s reactions are significant because they provide the learners with knowledge-based information and affective support for learning. For instance, Vigil and Oller (1976) argued that feedback contains linguistic and affective signals. Allwright (1975) listed nine basic functions of teacher feedback: (1) to indicate fact of error; (2) to indicate error location; (3) to indicate error type; (4) to indicate remedy; (5) to provide a correct model; (6) to indicate blame; (7) to indicate improvement made by the learner; (8) to indicate praise; and (9) to provide an opportunity for a new attempt. The first five functions deal with the knowledge-based domain and the last four deal with the affective domain of feedback.

The knowledge-based information that the teacher’s feedback conveys depends on the focus of the classroom lesson; for example, in the math class, the teacher’s reaction to the learner is mainly about mathematical content, which may be conceptual (e.g., mathematical formulas) or practical (e.g., how to use one formula to solve a particular problem). The teacher’s feedback in the L2 classroom adopting a grammar translation or audiolingual method is likely to provide exclusively linguistic information (e.g., the target language grammar) because the language instruction purpose is overt in such methods. However, the teacher’s feedback in an L2 classroom adopting a naturalistic communicative approach to teaching is ambiguous. The knowledge-based information can be linguistic, or non-linguistic and conceptual (e.g., North American culture). In fact, the primary instructional focus in immersion programs in Canada is on school subject instruction rather than language. Despite the broad boundaries of the communicative L2 teacher’s feedback, classroom-based SLA researchers conducting feedback research tend to approach the issue with an assumption that the L2 teacher feedback almost exclusively conveys linguistic information

(e.g., Chaudron, 1977; Long, 1977; Lyster & Ranta, 1997).

In sum, SLA research at large has identified the teacher's feedback as reaction to the learner's performance. This view allows a broad notion of feedback within the instructive context. In particular, it identifies the characteristics of feedback for knowledge-based instruction and affective support for learning. The notion of feedback for knowledge-based instruction is useful; it highlights the complexity of an L2 teacher's feedback that can address linguistic knowledge or non-linguistic world knowledge. Because the SLA research to discover these broad boundaries of the L2 teacher's feedback took the approach of identifying the teacher's behaviours within the instructive context, the categories are static.

Dynamic characteristics of feedback

As discussed earlier in this chapter, sociocultural SLA researchers capture feedback in action. Although the regulatory scale created by Aljaafreh and Lantolf (1994) described in detail the teacher's feedback actions, these actions were dependent on the context of particular writing sessions. Their scale is not readily applicable to the analysis of oral corrective feedback such as recasts. Based on sociocultural theory, the significance of feedback is its appropriateness in a ZPD. In this respect, the six scaffolding functions in Wood et al. (1976) describe the general characteristics of feedback in action.

The scaffolding functions correspond with descriptions of the regulatory scale developed by Aljaafreh and Lantolf (1994). For instance, the shift from the explicit to the implicit assistance on the regulatory scale is equivalent to the reduction function of the scaffolding functions. Similarly, the tutor's indication that "something may be wrong" plays the role of recruitment and direction maintenance in the functions of scaffolding. The tutor's provision and explanation of the correct form had a demonstration function (see **Table 43**). Further, the scaffolding functions help to indicate how the static characteristics of feedback can be operationalized in the teacher's feedback action. Some functions that

Table 43: Scaffolding Functions and Feedback Characteristics

Six Scaffolding Functions						
Wood et al. (1976)	Demonstration	Marking	Direction	Recruitment	Reduction	Frustration control
Aljaafreh & Lantolf (1994, p.471)	"Tutor provides and explains the correct form"	"Tutor indicates the nature of the error" "Tutor provides clues to help the learner arrive at the correct form" "Tutor identifies the error"	"Tutor indicates that something may be wrong" "Tutor indicates the nature of the error; but does not identify the error"	"Prompted or focused reading of the sentence that contains the error by the learner or the tutor"	The shift from explicit to implicit strategies	The shift from explicit to implicit strategies
Allwright (1975)	"To provide a correct model"	"To indicate fact of error" "To indicate error location" "To indicate error type"	"To indicate fact of error" "To indicate error location" "To indicate error type"	"To indicate fact of error" "To indicate error location" "To indicate error type"	(no example is applicable)	"To indicate improvement" "To indicate praise"

Allwright (1975) listed can be mapped on the scaffolding functions. For example, the function to provide a correct form in Allwright's list is equivalent to the demonstration function in Wood et al. (1976). The teacher's indications of "error fact, error location, and error type" illustrated in Allwright (1975), if put in action, are likely to function as "marking critical features," "directing" and/or "recruiting the learner's attention" (Wood et al., 1976) (see Table 43).

Recasts in sociocultural SLA

The current understanding about the recast based on cognitive-interactionist SLA research is static: it is based on the linguistic characteristics and the teacher's and the learners' behaviours. Therefore, the recast is inadequate for inclusion in the table of scaffolding functions. Understanding the functions of the recast contributing to learning within the sociocultural SLA framework requires re-locating this static linguistic behaviour in the dialogic action between the teacher and the learners. In particular, understanding the teacher and the learners' L2 teaching/

learning through their verbal interaction involving recasts is important because the unit of sociocultural analysis is “individual(s)-operating-with-mediational-means” (Wertsch et al., 1993, p.342).

As described earlier, learning is a goal-oriented activity, which is realized by concrete actions (e.g., utterances) in a given situation (Lantolf, 2000). In the sociocultural framework, the primary unit for differentiating activities is their goal because the same action (e.g., teacher feedback) may be taken to achieve different goals (e.g., language teaching vs. non-linguistic world knowledge teaching). Therefore, the investigation should include identification of the goals of the discourse involving the teacher recasts.

Furthermore, learning in the sociocultural framework is a social activity. The participants in it achieve intersubjectivity and sustain the ZPD for their learning through mediational means. Because recasts are utterances, they should serve mediational functions. The recast’s “demonstration” function is evident based on its definition: a reformulation of an erroneous utterance into a target form. The sociocultural investigation into recasts requires understanding whether recasts serve other scaffolding functions.

Chapter 6 : Case Studies of REs in the Sociocultural SLA Framework

Introduction

It is clear from my study that the relationship between the teacher's recasts and students' attention and their learning is complex. The data suggested that the effectiveness of feedback interaction involving recasts differed according to the teacher's and students' involvement in it. In this chapter, I present four cases that involve the teacher's recasts in the group context to examine how the dialogue between the teacher and the students, including the recasts, operated and contributed to the students' learning. I adopt the notions of learning discussed in the previous chapter: learning as action achieved through establishing intersubjectivity and creating ZPDs. The role and effect of recasts are analyzed and discussed in particular in relation to these two notions of learning.

Research Questions in Phase 2

The principal research questions guiding this phase of the study were:

What in the group RE dialogues related to the students' different learning outcomes? What functions did the teacher recasts play in the group RE dialogue with respect to ZPDs for L2 learning?

These research questions were broken down into two sub-questions regarding the participants' actions.

1 . What did the teacher intend to do in this episode? In what ways did she pursue her instructional intention?

2 . What did the students pay attention to, notice, and think during the episode? What did the students learn from the episode?

Database for Analysis

Among the 14 REs for which both students' stimulated recalls and GJ test results are available, I chose four group-based REs for analysis: REs 1102, 1104, 1106, and 1202. I chose group-based REs because (1) the students were found to have paid more attention during these REs and they learned more effectively from them, and (2) although the number of students' recalls is limited (i.e., a maximum of four students' recalls in group REs as opposed to eight students in the teacher-fronted REs), the students' recalls on group REs are more detailed than those on teacher-fronted REs. The four group REs were chosen because the data were complete; that is, the stimulated recall data and GJ test results for the group members were available.

Table 44 summarizes the characteristics of the REs chosen for analysis in Phase 2. All REs except 1102 occurred when the students were on task. The teacher intentionally approached the group table in REs 1104 and 1202 to monitor the students' group activities, but was involved by chance in REs 1102 and 1106. In each case, the teacher reacted to one of the group members' (whose name is underlined in Table 44) utterances containing either grammatical (REs 1102, 1104, 1106) or lexical (RE 1202) problems. All REs, except 1104, were isolated recasts. There were student uptakes in REs 1102 and 1106, but no-uptake reaction in RE 1202. In RE 1104 there was no chance for uptake.

REs 1102 and 1106 were effective in that the students accurately judged the sentences in Test 1 (i.e., 88% and 100% respectively) and Test 2 (i.e., 100% and 87.5% respectively). On the other hand, REs 1104 and 1202 were not effective; the students' results in Tests 1 and 2 were 50% or lower. The successful REs were associated with complete NFB ("noticing feedback") recalls from the students. The unsuccessful REs were not associated with NFB recalls; instead, students' recalls concentrated on AC ("attention to content") in RE 1104, and on AL ("attention to language") in RE 1202.

Table 44: Descriptions of REs

RE	Task context	Group members	Error	RE types		Attention			GJ Test	
				Delivery	Reaction	AC %	AL %	NFB %	Test 1 %	Test 2 %
1102	off task	Shoko, <u>Tokiko</u> , Yasuko *	Grammar	CPRE	Uptake	0	0	100	88 (5/6)	100 (6/6)
1104	on task	Shoko, Tokiko, Yasuko, <u>Hisako</u>	Grammar	SRE	No-chance	75	0	25	25 (2/8)	37.5 (3/8)
1106	on ask	Aiko, Eiko, <u>Shoko</u> , Yasuko	Grammar	CXRE	Uptake	0	0	100	100 (8/8)	87.5 (7/8)
1202	on task	Aiko, Eiko, <u>Keiko</u> , Fumiko	Lexicon	SRE	No-uptake	25	75	0	50 (4/8)	37.5 (3/8)

*The fourth member of the group, Hisako, was not at the table at the time of the RE.

Case Studies

I will discuss the findings for the phase 2 research questions according to each RE case. Each case contains transcripts related to the RE, and recalls from the teacher and students as evidence. A discussion follows the presentation of each case.

RE 1102

RE 1102 occurred during an off-task group discussion in which Ms. Johnson participated. Tokiko wanted to tell the teacher that a female singer whom they were talking about had graduated from her high school. When composing the sentence, Tokiko realized it did not sound right (Tokiko's stimulated recall 1). When she uttered the sentence "woman singer is my graduated school graduated" (turn 1A-251), she gave the teacher a quizzical look (Teacher recall session 1). Ms. Johnson reacted

to Tokiko with a recast, “Oh. She graduated FROM... MY school,” adding phonological emphasis on “from” and “my” and a pause between them (turn 1A-252). Listening to the recast feedback, Tokiko repeated “my school” (turn 1A-253) with the same stress as Ms. Johnson’s.

Excerpt 17: Dialogue from Group 1A during Lesson 1, October 1.⁵⁷⁾

1A-249	Ss	Do you know Uwa? Singer.
1A-250	Ms. Johnson	No
1A-251	Tokiko	Woman singer is my graduated school graduated.
1A-252	Ms. Johnson	Oh. She graduated FROM ... MY school
1A-253	Tokiko	my school
1A-254	Ms. Johnson	or high school or my junior high school. Oh, did you know her?
1A-255	Tokiko	No
1A-256	Ms. Johnson	No. Just the same school.
1A-257	Tokiko	Album. In the album.
1A-258	Ms. Johnson	Oh, that's interesting.

Ms. Johnson’s recasts served as a “demonstration” of a linguistic problem, which was one of the six scaffolding functions. She added phonological emphasis (i.e., the grammatical use of the verb “graduate” and a preposition) (turn 1A-252), which functioned as “marking the critical feature.” Ms. Johnson recalled that her utterance was an explicit correction, encoding her conscious feeling that “this is the way to say it, Tokiko!” (Teacher’s recall session 1). Ms. Johnson’s feedback was based on her moment-to-moment decision-making. Although Ms. Johnson claimed little concern with the accuracy of her students’ language (see the “Ms. Johnson’s recasts” section, pp.46-47), she had a set of criteria for evaluating their linguistic performance. Her criteria appeared simple — “easy stuff” and “difficult stuff.” The “difficult stuff” included conceptually difficult topics (e.g., human rights) and language Ms.

57) Bold face turn numbers indicate the RE.

Johnson considered that “they haven’t known yet,” for instance, theme-specific vocabulary. The “easy stuff” consisted of basic vocabulary and structures which she expected her students to be familiar with from their high school English lessons. Ms. Johnson expressed her greater willingness to accept linguistic deficiencies for difficult and abstract topics than for simple topics.

Excerpt 18: Teacher’s recall session 1, November 2.

If people are talking about ... how human rights are to be promoted and protected and nurtured and what are your responsibilities, those are more difficult topics, and people are more willing to accept some language deficiencies.

On the basis of her criteria, talking about a former student who had graduated from the same school was “easy stuff.” Ms. Johnson reacted to Tokiko and “consciously provided the correct form” explicitly so that she “would know the correct form” (Teacher’s recall session 1).

Excerpt 19: Teacher’s recall session 1, November 2.

The vocabulary that I used to explain it, ‘she graduated from the same school’ or ‘she graduated from my high school’ was quite easy vocabulary ... vocabulary that [Tokiko] knew, and from now she should be able to use, at least she knows the wrong one.

In the stimulated recall, Tokiko confirmed that she was aware of the teacher’s feedback. She noticed a gap between what she had wanted to say and what she was able to say and then noticed the teacher giving her feedback.

Excerpt 20: Tokiko’s recall session 1, October 5.⁵⁸⁾

I had something I wanted to say, but I was not certain about grammar and was confused when I was telling the teacher. [**The teacher said**]

58) The students omitted contextually evident words in their Japanese recalls. In order to translate their original Japanese recalls into English, necessary words were supplied in square brackets.

'graduated'. She rephrased [what I said]. At first, I was relieved that she understood what I wanted to say. Then [as I heard her rephrasing] I thought that was how to say it.

Tokiko's group members were also aware of Tokiko's language problem. Having heard the same story from Tokiko before the teacher joined in, they knew what she had intended to say. Therefore, the students' attention was on language form. Yasuko thought what Tokiko said "was puzzling... 'graduate' was confusing" and felt "it didn't sound right." Shoko's thoughts went even further; knowing Tokiko's message, she put herself in Tokiko's shoes:

Excerpt 21: Shoko's recall session 1, October 5.

When I heard Tokiko, I thought it sounded wrong, but I didn't know how to express the idea better either. I was wondering 'how to say this?'

Their attention to the language and their noticing the gap between the intended meaning and the actual output based on their current grammatical knowledge seemed to have facilitated their understanding of the meaning of the teacher's utterance. Shoko recalled:

Excerpt 22: Shoko's recall session 1, October 5.

The teacher said a sentence, and I thought that's the right expression.

For Yasuko, the repetition of "graduated" by the teacher and by Tokiko made "the word impressive" so she could "remember" the episode.

The participants' recalls showed that they shared intersubjectivity: Tokiko's utterance was grammatically problematic. Their intersubjectivity had the potential for the formation of a ZPD. Because the students defined Tokiko's utterance as a problem, Ms. Johnson's "demonstration" of the solution to the problem was significant. Further, the demonstration had its critical point marked with phonological emphasis (turn 1A-252) and repetition (turn 1A-254). Using paralinguistic and conversational cues, Ms. Johnson made her corrective intention for recasting evident.

Ms. Johnson's feedback was effectively provided in the students' ZPD. The students were motivated to find an answer to their internal question; therefore, they interpreted the corrective nature of the recasts accurately. Because they found the answer to their question, they were able to correctly judge the GJ test items derived from this episode 88% correctly on Test 1 and 100% on Test 2.

RE 1106

RE 1106 was a group-based episode in which Shoko was confused about the choices between the plural and singular forms of the auxiliary verb "do": "citizen don't" or "citizen doesn't" (turn 4A-058), as she tried to express her opinion that citizens are not environmentally conscious even though governments advocate environmentally conscious policies. Noticing her confusion, Ms. Johnson gave the student an isolated recast, "doesn't." In the next turn, the teacher added an explicit correction move; she contrasted the two verb forms with phonological emphasis on the plural "s" in "citizens" (turn 4A-062).

Excerpt 23: Dialogue from Group 4A during Lesson 4, October 29.

- | | | |
|--------|-------------|--|
| 4A-056 | Shoko | Government to do ... to citizen |
| 4A-057 | Aiko | Citizen |
| 4A-058 | Shoko | 'It's important. It's important.' But citizen doesn't ... know about it but ... don't do. doesn't. don't do. |
| 4A-059 | Ms. Johnson | doesn't. |
| 4A-060 | Students | (laugh) |
| 4A-061 | Shoko | Thank you |
| 4A-062 | Ms. Johnson | Citizen doesn't. CitizenS don't. |
| 4A-063 | Shoko | ... Citizens don't. ... Because it's troublesome. |

Ms. Johnson's feedback in this RE was, in her terms, "help."

Excerpt 24: Teacher recall session 2, December 13.

I view all kinds of correction as 'help'. ... It's wrong because they don't know

the way to say it yet. The job of the teacher is to provide what they don't know. To give them help to do it as well as possible.

In providing help, Ms. Johnson made moment-to-moment context-based decisions. For instance, she found face-to-face interaction conditions, in particular eye contact, important and “[made] a difference in how [...] [she] respond[ed] to people” (Teacher's recall session 1). Her careful observation of her students helped her to decide to whom she would give feedback and how much she would give. She had categorized her students according to how receptive they would be to corrections.

Excerpt 25: Teacher's recall session 1, November 2.

I think [giving or not grammatical correction in one occasion] is an unconscious thing and ... maybe it just has to do with ... how I feel the student is going to respond to it. Some students don't respond well to correction, and some students really want it.

According to Ms Johnson, Shoko was one of the few students who was not afraid of being corrected: in her words, “Shoko likes to have correction. She responds well to it” (Teacher's recall session 1). As she casually approached Shoko's group table, Ms. Johnson saw Shoko looking at her, and heard her ambivalence about the verb form. She, therefore, provided Shoko with the help.

In her assistance, Ms. Johnson provided “demonstration” of the correct form (turn 4A-059). She added “marking the critical feature” function to her utterances by repeating the two verb forms with their proper subjects: “citizen” and “citizens” (turn 4A-062). Her marking incorporated not only repetition, but also phonological emphasis.

Meanwhile, the group members at the table had established intersubjectivity that focused on Shoko's linguistic problem. Being the speaker, Shoko noticed the gap between what she had wanted to say and what she did not know in terms of English grammar.

Excerpt 26: Shoko's recall session 4, November 1.

I was wondering if "s" was necessary for "citizen" to indicate a group of citizens as a whole. I thought "citizen" can mean a group of citizens. I said [the possible auxiliary verbs for "citizen"] aloud.

Shoko tried to solve the problem by testing her hypothesis aloud (see Kowal & Swain, 1994; Swain, 1995; Swain & Lapkin, 1998). Her voiced hypothesis-testing made her group members aware of the problem. For instance, Yasuko recalled:

Excerpt 27: Yasuko's recall session 4, November 4.

[We were] confused about the plural form. [We were] not sure how to make a plural form out of a collective noun "citizen."

Because the students were aware of their problem, they perceived Ms. Johnson's help as appropriate feedback within the ZPD. Being aware that they could not solve the problem by themselves, the students found Ms. Johnson's recast meaningful.

Excerpt 28: Shoko's recall session 4, November 1.

The teacher walked by our table, then **the teacher heard what I was saying and she said, "doesn't."** [...] **I thought "uh, I see."** I always get confused when to use "s" and when to use "don't" or "doesn't."

Yasuko noticed the teacher's feedback, and thought, "oh, I see," "it must be correct because the teacher says so" (Yasuko's recall session 4). Eiko and Aiko made similar NFB recalls.

Excerpt 29: Eiko's recall session 4, November 1.

We learn third person singular in junior high school, so we think we are able to use [the rule] properly, but when we had the specific word, like "citizen," we were not sure. [...]. We were all confused, and we almost gave up and let it go, **but the teacher told us [the appropriate form], and we thought "uh-huh."**

Excerpt 30: Aiko's recall session 4, November 1.

I didn't know the teacher was nearby. So I was surprised when she suddenly said "doesn't." [...] **We were relieved because that was the correct answer for us.**

RE 1106 was similar to RE 1102 in terms of the cognitive functions that the recast fulfilled: "modeling" and "marking the critical features." Ms. Johnson utilized strategies, such as adding more feedback moves and phonological emphasis, to mark the features. By adopting the explicit form-contrast strategy, she made her corrective intention evident.

The teacher gave a recast in response to a problem which the students autonomously realized they needed external assistance to solve. As in the case of RE 1102, the students and the teacher established intersubjectivity to define that the auxiliary verbs were problematic. Ms. Johnson provided her feedback within the ZPD. Her interactive dialogue with the students created a learning opportunity for the students; all four students reported in their uptake claim forms that they had learned "citizen doesn't" and "citizens don't." Furthermore, they answered the corresponding GJ test items correctly. The episode was successful because both the students and the teacher mutually recognized the same language problem and were able to solve it.

RE 1104

REs 1104 and 1202 occurred during the activity in which the students were asked to make a list of ten responsibilities. This group task from the Human Rights unit aimed to make the students aware of the complementary relationship between rights and responsibilities. The task, however, was conceptually difficult for the students, and Ms. Johnson anticipated it would be problematic based on her past experience. In assisting her students in generating a list of responsibilities, Ms. Johnson adopted a technique in which she visited each group, asked the students what rights they had, and presented examples of responsibilities relating

to the rights the students answered (Teacher recall session 1).

Excerpt 31: Teacher recall session 1, November 2.

In the previous year, the students had the same problem with this particular activity. ... I've often found that students have had difficulty getting more than four or five responsibilities, but if they are asked, questions are given, and more examples, like 'Do you have a right to vote? Don't you also have the responsibility to vote?', then they said, you know, 'hey, maybe each one has a corresponding responsibility.'

RE 1104 took place when the teacher visited Shoko's group. The students had run out of ideas. In response to the teacher's prompt (turn 2A-128), Shoko and Hisako suggested the right to freedom of thought; however, neither student was able to use the appropriate term, "freedom of thought." Shoko said "thinking freedom" (turn 2A-129) and Hisako said "think freely" (turn 2A-130). After their replies, the teacher provided the recast, "freedom of thought," in her extended turn.

Example 32: Dialogue from Group 2A during Lesson 2, October 8.

- | | | |
|--------|-------------|--|
| 2A-128 | Ms. Johnson | Can't think of anything? Ok. What other rights do you have? |
| 2A-129 | Shoko | Rights? Marry. Freedom ... thinking freedom |
| 2A-130 | Hisako | think freely XX |
| 2A-131 | Ms. Johnson | Ok. So you have the right to get married. You have freedom of thought. ... If you have the freedom of thought, what's your responsibility?
(Silence among students)
Aren't you responsible for thinking ... about problems, and thinking solutions, and letting other people think what they want? |
| 2A-132 | Shoko | Uh. ... Oh, boy. (laugh) |
| 2A-133 | Ms. Johnson | So if you want to think ... about your things and what you want, you have the responsibility to let other people think what they need. |

Examined for their scaffolding functions, Ms. Johnson's utterances served three functions: recruitment, demonstration, and marking of critical features. She initially asked a question, "what other rights do you have" (turn 2A-128), so that she recruited and drew her students' attention to the task. This strategy corresponded to the recruitment function. In her extended turn 2A-131, Ms. Johnson provided a "demonstration"; she showed the relationship between responsibilities and rights. Ms. Johnson made some repetitions in her utterances: "if you have the freedom of thought," "Aren't you responsible for thinking," "letting other people think," "if you want to think," and "let other people think." Discursive repetitions served to generate salience; Ms. Johnson's repetition marked the critical features of her content teaching. Through questioning, answering, and repeating, Ms. Johnson verbally demonstrated how the concepts of responsibilities and rights were related. Her utterances were mediational tools to establish intersubjectivity and a ZPD for teaching the relationship between rights and responsibilities.

Mediated by the teacher's demonstration, the students reached the same intersubjectivity with Ms. Johnson i.e., learning the relationship between the rights and responsibilities. Tokiko and Hisako revealed in a stimulated recall interview that they had understood the teacher's instructional goal.

Excerpt 33: Tokiko's recall session 2, Oct. 12.

Before this [teacher's explanation], I was trying to think of responsibilities alone, but here I realized that if I thought of our rights, responsibilities come along with the rights.

Excerpt 34: Hisako's recall session 2, Oct. 15.

I was listening to the teacher and I began to realize that we could find our responsibilities if we thought of our rights.

Shoko was impressed by the teacher's logical demonstration.

Excerpt 35: Shoko's recall session 2, Oct. 15.

I thought Ms. Johnson was so smart [that she connected the right and responsibilities].

In fact, Shoko's exclamation, "oh, boy" (turn 2A-132) seems to represent this astonishment. In contrast, Yasuko was so frustrated with the abstract topic for the lesson that she hardly paid attention to the discussion. She confessed during the stimulated recall that she completely tuned out the conversation.

This episode was an example of attention to language being abandoned in favour of content instruction in theme-based language instruction. Ms. Johnson operationalized her language for demonstrating models and marking critical features for instruction so that the dialogue with her students would construct a ZPD. However, she did not use for marking critical features the same devices from the overtly linguistic REs: phonological emphasis and pausing for student's uptake. Instead, she incorporated semantic repetitions for marking the critical point. The teacher and the students, in fact, co-constructed the ZPD for learning the relationship between responsibilities and rights. Although Ms. Johnson's recast demonstrated the correct linguistic form, considering this exclusively as a linguistic demonstration is inappropriate in respect to their ZPD.

Nevertheless, Shoko made an NFB recall:

Excerpt 36: Shoko's recall session 2, October 15.

I said "freedom of thinking." I was not certain if it should be "thinking" or "thought." I didn't come up with "thought" then, so I said "freedom of thinking" then I felt it might be wrong. Then the teacher said "freedom of thought." So I thought, "Oh, oh. I was wrong – just as I thought."

Shoko was aware of feedback in the teacher's utterance, despite the strong orientation toward the content learning in the discourse. As she explained in her recall, Shoko noticed Ms. Johnson's linguistic demonstration

because she was the student who had made the original mistake and because she was aware of her problem. This suggested that Shoko was constructing another ZPD that was oriented toward language learning. Although she noticed the teacher's linguistic model, she did not learn it immediately; she did not record the phrase "freedom of thought" in her uptake recall form and her GJ Test 1 was inaccurate.⁵⁹⁾ However, being aware of her language-oriented ZPD, Shoko took a preliminary action for learning: i.e., noticing the useful information in the affordance (van Lier, 2000).

In contrast to Shoko, who actively oriented her learning toward language, Yasuko gave up trying to direct her attention even to the content learning. She was frustrated with the abstract topic, and tuned out the group discussion. The four students' stimulated recalls regarding this RE corroborated the finding from Coughlan and Duff (1994) that individuals experience and learn different things from the same event.

RE 1202

RE 1202 was another group RE which took place during the responsibility activity. Ms. Johnson was with group B to facilitate their discussion. Responding to Ms. Johnson's prompt (turn 2B-130), Keiko made an erroneous utterance (turn 2B-132) in which she had meant to say "do not make other people get involved in a religion they don't believe in" (Keiko's recall session 2). Ms. Johnson thought using the verb "involve" in that given context was inappropriate (Teacher's interview 1), and excluded it from her recast: "not try to force other people" (turn 2B-133). To this recast, three students nodded (in the video) and Fumiko repeated it (turn 2B-135) to acknowledge that the expression was what Keiko had meant to say. In the following turn (turn 2B-136), the teacher

59) Although Shoko judged both items in Test 1 incorrectly, she answered the same items in Test 2 correctly six weeks after the stimulated recall interview. Her success in Test 2 could be attributed to the stimulated recall session where she viewed the RE objectively and made reflective recalls.

also added another rephrase. She contrasted the connection between “you have” and “let them have” in her semantic repetitions.

Excerpt 37: Dialogue from Group 2B during lesson 2, October 8.

- 2B-128 Ms. Johnson So you have the responsibility to get the education. You have to study and you should be responsible. Ok? Uh, what other rights do you have? ... Do you have the freedom of religion?
- 2B-129 Students Yes.
- 2B-130 Ms. Johnson Yeah? What is the responsibility then?
- 2B-131 Students *Ahuu?*
- 2B-132 Keiko ... Not involve another people. (laugh)
- 2B-133 Ms. Johnson Ok. So not try to force other people.
- 2B-134 Students Mm, mm.
- 2B-135 Fumiko Uh, force.
- 2B-136 Ms. Johnson Let them have their own religion. Ok. I think you can think of five more easily.
- 2B-137 Keiko Ok. Thank you. (Teacher leaves)

As in RE1104, Ms. Johnson focused on theme teaching during this interaction. Prior to her recast in turn 2B-133, Ms. Johnson asked a question (turn 2B-130), which functioned to recruit the students' attention to the activity for teaching the relationship between responsibilities and rights. She once again demonstrated how to relate rights to responsibilities, though her utterances in turns 2B-133 and 2B-136 were not as extensive as those in RE 1104. This was probably because the religion topic was the second example after the education example demonstrated in turn 2B-128.

Unlike RE 1104, however, Ms. Johnson had a linguistic concern when she rephrased Keiko's answer during the interaction. She thought Keiko's use of “involve” was incorrect, and intentionally used the verb “force” in order to remind the students that they should know that word.

Excerpt 38: Teacher Recall Session 1.

It's totally inappropriate in a way what she was trying to say. And the correct word, for her level was 'force' and it's the word she's seen I know since Unit 1 because it's usually in Unit 1.

Ms. Johnson's linguistic concern was secondary to content teaching. This was observed in her verbal action; she did not place any phonological emphasis on the utterance nor did she pause for uptake. As in the other content-oriented episode, RE 1104, Ms. Johnson did not recruit the students' attention to or mark the linguistic feature in her recast turns. Thus, the ZPD in RE 1202 was content-based.

By nodding affirmatively in turn 2B-133, the students indicated that they acknowledged and agreed to Ms. Johnson's recast in turn 2B-132. From their nodding it was, however, unclear whether they saw content-based or language-based significance in the teacher's utterance. Fumiko's repetition of "force" suggested she had paid attention to the verb; she took the teacher's language-based intention (i.e., a reminder of the verb "force"). Later in their uptake claim forms, three students reported that they had learned "force." Aiko wrote, "force-on-," and Eiko wrote "force (person) on." Fumiko recorded, "I didn't know how to use *force A to B* so I looked it up in the dictionary." The students, therefore, had achieved a new intersubjectivity of their own regarding "force."

Relevant dialogue to show the students' focus on the verb "force" was found immediately after the teacher left the group, when the students started writing down the answer she had suggested.

Excerpt 39: Dialogue from Group 2B during lesson 2, October 8.⁶⁰⁾

2B-138	Aiko	Not try to ...
2B-139	Keiko	Not try to ... force ... people ...
2B-140	Eiko	(yawn) Not to try to people ... <i>Kore, nani-wosuruttekoto?</i>

60) Utterances in Italics were in Japanese. English translations are in the square brackets.

- [= What are we supposed to do?]
- 2B-141 Fumiko *Kyousei tte* “ought”? [= Is enforcement “ought”?]
- 2B-142 Keiko “We ought not”
- 2B-143 Aiko ought
- 2B-144 Eiko “should”
- 2B-145 Eiko *XX janai?* [= Isn’t it?]
- 2B-146 Fumiko involve?
- 2B-147 Keiko Involve *de iika*. [= “Involve” will do] Force people involve
- 2B-148 Aiko ... Force people ... involve...?
- 2B-149 Keiko religion
- 2B-150 Aiko involve in religion?
- 2B-151 Keiko into, involve into religion. *Akanno?* [= Is this wrong?]
- 2B-152 Aiko into
- 2B-153 Fumiko Force into?
- 2B-154 Keiko *Nankasa, kyousei tekini* force *naninani* into *naninani chaun?* To *iruyan*. [= Wasn’t it like ... [= force] “force” so and so into so and so, was it? Don’t we need “to”?]
- 2B-155 S *I-hinn* [= not necessary]
- 2B-156 Keiko *Dakara* ... [= so...]
- 2B-157 (disagreement/confusion)
- 2B-158 S Not force?
- 2B-159 Keiko Not ... No ... Not...
- 2B-160 Aiko Don’t? ...
- 2B-161 Keiko - force ... people ... to
- 2B-162 Eiko Not to force?
- 2B-163 Aiko Not to force. Not to forced to ...
- 2B-164 Fumiko *XX* ... not forced people to involve into religion.
- 2B-165 (Keiko flips pages to find a section in which “force” is used.)
- 2B-166 Eiko But we understand is religion, ... *naiyo na*. [= content is...]
- 2B-167 Aiko *Unn*. [= yeah]
- 2B-168 Keiko (reading out a sentence from a book) “forcing ... company to fire in” ... to *XX*. Not to force to involve people in religion. *Kore* [= this]

2B-172	Fumiko	Not force ... to ...
2B-173	Keiko	people, involve people ... in?
2B-174	Ss	Mmm? Involve in? To <i>irunn</i> ? [= Do we need “to”?]
2B-175	Aiko	Involve?
2B-176	Keiko	Involve people in, <i>jaa</i> . [= oh well] ... <i>Tekitou-de iinenn</i> . [= It’s OK, don’t take it seriously.] Take it easy. Take it easy. ... Another...

Students’ repetitions of the verbs “involve” and “force” and the prepositions “into” and “to” indicate their intersubjectivity: (1) use of the verb “involve” (lines 2B-146 and 147), but proper use of it, including the appropriate preposition, was unknown (lines 2B-150 and 151); and (2) use of the verb “force” (line 2B-153) but the grammar regarding this verb was unknown (lines 2B-154 and 161).

That the students had reached their own intersubjectivity was confirmed in their stimulated recalls. Keiko commented that “we couldn’t write the sentence well. We rewrote the sentence many times” (Keiko’s recall session 2). Eiko recalled that “We were trying to say we shouldn’t force [religion]” (Eiko’s recall session 2). Aiko reported that “We were confused here how to order words, like involve and into or force and into” (Aiko’s recall session 2). Fumiko gave an extended recall about the second problem.

Excerpt 40: Fumiko’s recall session 2, October 12

How to use ‘force.’ Grammar. We wondered what word comes after ‘force.’ Like ‘force other people to’ [...] Eiko said ‘not force to,’ and Keiko said something different; a different word came after ‘force,’ and she asked Aiko which is better, then I thought the structure should be ‘force A to B,’ but I was not sure what A and B were; I mean whether A should be a person or an object.

The students talked to each other, and they thereby established intersubjectivity and the ZPD for learning how to use the verbs “involve” and “force.” In the ZPD, they were aware of the gap between what they

wanted to do and what they could do. They did not, however, have enough resources to fill the gap. For instance, Ms. Johnson's use of "force" was in a colloquial fragment format so that there were few clues from which they could induce how this verb could be used grammatically in conjunction with "involve." The students needed external help, as was evident when Keiko consulted a textbook. Their learning was incomplete; their GJ test outcomes showed this incomplete understanding. Three students did not judge the original erroneous sentence including "involve" as incorrect (i.e., "Don't involve other people in your religion") yet three students accurately judged the test item containing "force" of inappropriate usage as an incorrect sentence (i.e., "It is not right to force other people believe your religion"). Although incomplete, what they thought they had learned was persistent. The four students each incorrectly judged the sentence they co-constructed (i.e., "We should not force people to involve in our religion") as a correct sentence in Tests 1 and 2.

Ms. Johnson's teaching intention in RE 1202 achieved a mixed goal. She initially gave brisk feedback with the intention of content instruction.⁶¹⁾ However, the students perceived the linguistic form Ms. Johnson indirectly wished to teach as being more significant. They picked up the lexical item. In the course of their output attempt, the students realized their gap between what they wanted to do and what they could do with the verb. In this respect, the recast was not feedback (i.e., help); rather it was a stimulating affordance for new learning to which the students responded autonomously and actively.

The verb "involve" calls for additional consideration. The teacher rejected the verb because she felt it was an inappropriate verb in the given context. However, the verb "involve" recurred in the students' discussion. In their recalls, the students used the Japanese word "makikomu," whose

61) Keiko was observed in a later dialogue to be the first to come to think of a right to generate a responsibility. Although she did not report this learning strategy either in her uptake claim form or in a stimulated recall interview, she had learned what Ms. Johnson had intended to teach.

literal translation into English is “involve” (see Jewel & Hatori, 1992). Since the majority of Japanese people are non-religious, the students might have had an apathetic feeling toward becoming a member of a religion. Because “makikomu” is an important thought associated with religion, the English version of the word was conceptually appropriate for the students. Ms. Johnson imposed her interpretation of her students’ meaning rather than negotiating the meaning.

Discussion

Learning as Action

As discussed in Chapter 5, human mental functioning is action (Wertsch, 1998): learning is a mental action aimed at gaining self-regulation. The students’ shifts in gaining self-control were observed in the cases described above. For example, in RE 1106, Shoko controlled the proper use of the auxiliary verb “don’t” in relation to the plural subject “citizens” in her utterance (turn 4A-063). After the interaction with Ms. Johnson involving RE 1202, Keiko generated a right first and thought of a responsibility corresponding to the right (see Footnote 61, p.127).

Learning as mental action was oriented to an instructional objective (Lantolf, 2000; Leont’ev, 1981). Ms. Johnson’s providing feedback aimed at language instruction and non-linguistic world knowledge corroborates other feedback research in SLA in which feedback served more than one purpose. The priority between Ms. Johnson’s two goals was determined spontaneously in each interaction context. In REs 1102 and 1106, Ms. Johnson reacted to the linguistic problems that the students identified. For instance, she noticed Tokiko’s quizzical look as she produced an erroneous utterance (RE 1102) and Shoko’s questioning in her alternation of auxiliary verbs (RE 1106). On the other hand, in REs 1104 and 1202, Ms. Johnson was preoccupied by her content-instruction objectives.

Learning as mental action was mediated by discourse. In REs that facilitated the students’ learning, the teacher used language that served several functions: particularly demonstrating models, marking critical

features, and recruiting the students' attention. The functions were operationalized differently in different contexts: linguistic features were often marked by phonological and paralinguistic emphasis, whereas content was marked by semantic repetitions. Even though the utterances in two interactive events shared linguistic characteristics, their functions in the given activities could be different. The teacher's utterances characterized as "recasts" functioned for different instruction purposes as illustrated earlier.

The objectives for learning were determined also by the individual learners. The cases presented above show the students learned something different from any given interaction. What they learned depended on the goals of the individual learners participating in the interaction within a ZPD. For instance, the students learned linguistic expressions in REs 1102 and 1106. In 1202, the students were reminded of the useful verb "force," and tried to learn it; their learning was incomplete because they did not have enough opportunities to understand the complete grammatical usage of the verb. In RE 1104, Hisako and Tokiko learned content, Shoko learned a linguistic expression, and Yasuko learned nothing.

Recasts in the ZPD

Learning as mental action was mediated by discourse. Being a form of linguistic behaviour, recasting served different functions in the REs illustrated above. Their functions were different according to the teacher's immediate instructional goal.

Were all recasts "demonstrations of linguistic forms?"

Demonstration is one of the six scaffolding functions in a ZPD. The data from this research showed recasts were indeed demonstration of target forms. Ms. Johnson made recasts in REs 1102 and 1106 to demonstrate the correct form of what the students meant to say. In REs 1104 and 1202, Ms. Johnson's recasts demonstrated model forms, though linguistic correction was not her priority. Rather, Ms. Johnson's primary

intention in her demonstration was directed to non-linguistic content (i.e., in REs 1104 and 1202). Thus, the same acts of recasting by the teacher did not serve the same demonstration functions.

Although demonstrating a model is an important function in the ZPD, the teacher's recast may impose her interpretation of the original utterances onto the learners. Recasting involves the teacher's inferences of the learner utterances. Ms. Johnson was observed to infer from her students' utterances; for instance, she treated her students' incomplete sentence problems with SREs. A learner, however, may not always accept an expert's reformulation (e.g., a recast), as Swain and Lapkin (2001) found in their study, because it may not represent what the learner intended to express. In RE 1202, the students rejected Ms. Johnson's recast that excluded "involve" because "involve" was an important word for the students to use to represent their thought. Recasts, provided within spontaneous oral conversation, may impose a model on the learner different from the learner's thought.

Did the teacher's recasts operate within a ZPD?

The teacher's dialogic utterances serving the scaffolding functions can forge a ZPD (Donato, 1994; McCormick & Donato, 2000). Ms. Johnson's recasts (i.e., demonstrations) were found to have co-served additional "marking of critical features" and "recruitment" functions. Thus, the teacher's recasts did operate within a ZPD: however, those additional functions were operationalized differently and constructed different ZPDs in the linguistic REs and in the content REs.

In the linguistic REs (i.e., 1102 and 1106), Ms. Johnson tended to mark the critical feature using paralinguistic and communication devices simultaneously. Therefore, the linguistic recasts were often overt "error treatment" (e.g., Allwright, 1975). The participants in the discourse shared the understanding of the dialogic event as error treatment. A similar covert understanding of an event among classroom participants was reported in Doughty and Varela's study (1998). The teacher in their

study incorporated marking and demonstrated “scaffolding” devices. Their report about their students’ imitating the corrective recast procedure among themselves also indicated that there was intersubjectivity among the students in that they viewed such an action as correction.

In the content REs (i.e., 1104 and 1202), Ms. Johnson marked the content-based critical features by repetitively demonstrating how to relate responsibilities and rights. Because she intensively provided the demonstration, the teacher recasts in content REs often occurred without giving the students uptake opportunities. These recasts tended to become embedded in the teacher’s extended utterances, and their function as linguistic reformulation appeared ambiguous. Lyster (1998b) was concerned about such ambiguity in the linguistic remedial function of recasts. He found that the teachers in the four French immersion classrooms he studied provided recasts and non-corrective repetition in similar ways: giving affirmative comment and corrective or non-corrective feedback embedded within expanded comments.

Understanding the linguistic value of recasts provided for non-linguistic purposes is difficult for the learner. Being the demonstration of the correct form, the recast is an “affordance for learning” (van Lier, 2000). However, a linguistic demonstration in non-linguistic REs is accompanied by few scaffolding functions from the teacher (e.g., little phonological emphasis). Therefore, the students need to exercise considerable self-regulatory agency in order to understand those recasts. For instance, they need to identify the problem source, contrast the correct and incorrect forms, and if necessary, give rationales for the correct form. As Shoko evidenced in RE 1104, a motivated learner may be able to notice linguistic correction in non-linguistic recasts. However, her unsuccessful performance in GJ Test 1 suggests that learning independent from external support may take considerable time.

Chapter 7 : Conclusion

In conclusion, I first present a comprehensive summary of the findings from the study. The summary focuses on the recasts in Ms. Johnson's classroom, the students' thoughts regarding the recast episodes, and the efficacy of the recasts. Then I discuss the implications of this study in relation to current theories about language and L2 learning, future classroom research, and L2 classroom practice. The shortcomings of this study conclude the chapter.

Summary of Findings

Recasts in Ms. Johnson's Classroom

The outstanding difference of recasts in Ms. Johnson's classroom from those in other classroom-based feedback research was the infrequency. Teacher feedback in general was extremely infrequent: only 25 REs within the 350 minutes of recording time. The teacher's stimulated recall revealed that her primary focus in this class was facilitating students' communication. In contrast to the FL classroom studied in a previous recast study (Ohta, 2000), Ms. Johnson placed little emphasis on the instruction of linguistic components because she knew her students were concurrently taking other classes which had a more linguistic orientation, such as English Grammar, Phonology, and Academic Writing. Ms. Johnson prioritized "facilitation of discussion" over "linguistic correction" in her time-constrained class because the curriculum required only "a fair degree of accuracy" (College Catalogue, p.16).

Unlike the NS participants in experimental studies (Mackey et al., 2000; Mackey & Philp, 1998; Pica et al., 1989), Ms. Johnson did not make negotiation moves in her classroom, either. Having taught English to Japanese learners for more than 10 years and also being a fluent speaker of Japanese herself, Ms. Johnson was familiar with Japanese students'

linguistic problems, such as L1-transferred errors and strong Japanese accents, and did not have much difficulty inferring her students' meaning. Thus, she did not need to make frequent negotiation moves. Mackey et al. (2000) provided a similar explanation for their findings that the near-native Italian as FL interlocutor interacting with the IFL (Italian as a Foreign Language) students did not provide as frequent phonological recasts as the NS interlocutors did to their ESL learners. The researchers concluded that this was because the near-native interlocutor was familiar with the IFL students' phonological problems and thus had fewer comprehension difficulties.

Ms. Johnson was found to have provided her students with uptake opportunities about half the time after her recasts. This finding contrasted with the studies by Oliver (1995) and Lyster (1998b) in which NS children and the French immersion teachers provided the learners with uptake opportunities only one-third of the time. Among the uptake opportunities provided by Ms. Johnson, the students responded only half the time. This finding was similar to those from Oliver (1995) and Lyster (1998b).

Despite the differences, Ms. Johnson's recasts were found to share other characteristics found in the previous studies. Recasting was the feedback move most frequently employed by the teacher. As in studies by Lyster (1998a) and Mackey et al. (2000), recasts in this classroom were also provided more to grammatical than to lexical errors.

Students' Attention to Recasts

In the cognitive investigation of the students' attention to recasts, the trends of students' attention compared with the static characteristics of the teacher's recasts were mixed. Although the students were more likely to pay attention to language in CXREs and CPREs than SREs, they were likely to notice feedback in grammatical REs which were SREs. The students were found to have paid attention to language and even noticed feedback in REs without uptake opportunities. A constant tendency was

that the students were more attentive to the teacher recasts in the group than in the teacher-fronted context.

In the sociocultural investigation, the students manifested agency in their L2 learning. They paid attention to teacher recasts if the feedback was significant and relevant for their learning. As seen in the students' accounts of their attentiveness in the group interaction reported in Chapter 4 and their stimulated recalls about the REs illustrated in Chapter 6, the students autonomously identified their linguistic problems during interaction with their peers and the teacher. The teacher's recasts provided to the linguistic problems they identified were useful affordances within the ZPD.

When the students did not pay much attention to a recast as a linguistic affordance, they had reasons for it. The recasts in the teacher-fronted discussion were often not noticed as linguistic feedback. This was attributed to the incomprehensible peer utterances in the whole class discussion. As reported in Chapter 4 (the "Students' accounts of their attentiveness in the teacher-fronted interaction" section, pp.73-75), the students found their classmates' utterances in the teacher-fronted interaction inaudible or difficult to process. As a result, they could not perceive the specific linguistic problems for which the teacher provided a recast. The students missed the teacher recasts in the teacher-fronted interaction because the students were not in a relevant ZPD. Some of the teacher-fronted REs in which the students noticed feedback were, in fact, the uptake REs. The exchange between the teacher and the classmate who received the recast created the ZPD for language learning to which other listeners attended.

The teacher's recasts during debriefing after small group work were often unnoticed. A reason the students gave for their inattentiveness was the I-R-F discourse pattern. The I-R-F was a typical instructional discourse pattern associated with content learning. Being a theme-based EFL classroom, Ms. Johnson's "initiation" questions during the debriefing activity were oriented to content. Being invited into a ZPD for content

learning through the teacher's content-based questions, the students were in a ZPD that related to content rather than linguistic learning. Noticing the linguistic feedback and learning from the affordance was, therefore, secondary.

Effectiveness of Recasts

The effectiveness of recasts as critical linguistic feedback based on the students' GJ tests was moderate. Overall, the students correctly answered approximately 60% of the items in the GJ tests. The test results showed that the students' attention levels paid during the REs had some relationship with their judgment. The students were more likely to correctly judge test items from the REs to which they had paid language oriented attention. The students' language oriented attention was associated with correct judgments on corresponding test items (i.e., items derived from REs with "AL" or "NFB and AL" recalls) of 59% in the class total (63.6% in the group RE items). Their NFB recalls were associated with correct judgments of 73.9% in the class total items derived from NFB REs, and 81.3% on the items from the group-context NFB REs. (See Tables 37 and 39, pp.88-89). In relation to linguistic characteristics of REs, the students judged grammatical items better than lexical items.

The recasts discussed as effective linguistic correction in Chapter 6 were REs 1102 and 1106. In these REs, besides the linguistic demonstration function, Ms. Johnson operationalized the marking critical features and recruiting attention functions through recasting: she added phonological emphasis. She assigned multiple functions, something that cognitive-interactionist SLA researchers call "attention-getting" (Nicholas et al., 2001), to the short, brisk feedback move. Ms. Johnson successfully established a ZPD among the students for language instruction. The students, initiating their language learning by identifying a linguistic problem to be solved, collaborated with the teacher in establishing the ZPD. When the students and the teacher established intersubjectivity and defined the discourse event as linguistic correction,

the students learned and maintained it. Three students reported the auxiliary verb usage in their uptake reports immediately after the lesson involving RE 1106. The students correctly judged the relevant Test 1 items from REs 1102 and 1106, too.

On the other hand, recasts in REs 1104 and 1202 were ineffective linguistic recasts. They were ineffective because Ms. Johnson did not operationalize the marking critical features and recruiting functions for language teaching purposes. That is, the ZPDs she established were not for language instruction. In RE 1202, Ms. Johnson's brisk recast utterance, "force," was not a sufficient input for the students' syntactic learning of the verb. In addition, the ineffective REs involved little student contribution to achieving intersubjectivity. In particular, the students' initiation in identifying the linguistic problem was often missing in the unsuccessful REs. An exception was Shoko in RE 1104, who entered into a language learning ZPD out of her own motivation to clarify her uncertain understanding about "freedom of thought." Shoko evidenced that an active and motivated student could learn the linguistic aspects she wanted even through linguistically implicit REs. Furthermore, the students' identification of linguistic problems often seemed a springboard for language learning. For instance, 87.5% of the NFB recalls contained AL recalls in the group context (see Note on Table 22, p.65). After attempting to use the verb "force," the students in Group B constructed a ZPD for language learning. Their learning was incomplete because they did not have enough external knowledge for internalization.

Following the cognitive-interactionist SLA approach to recasts, this study investigated the efficacy of recasts in L2 development. However, the assumption that all recasts were linguistic corrections was inappropriate according to the current dataset. Some recasts played the role of "demonstration function" for content learning. Even though recasts in a content-oriented ZPD may be ineffective for language learning, they may facilitate content learning. The recast (i.e., action) in this study was evaluated on its efficacy for language instruction, and the recasts in REs

1102 and 1106 proved to be effective while REs 1104 and 1202 did not. However, although the students did not perform well on the linguistic test items from RE 1104, for instance, they learned how to relate human rights and responsibilities. In this respect, the teacher feedback in RE 1104 was as successful as her feedback in REs 1102 and 1106. Identification of goal-oriented activity in relation to a recast is important for a relevant and valid evaluation of the effect of feedback.

Theoretical Implications

Problems in the Definition of Recasts

Long (1996; Long & Robinson, 1998) calls recasts “implicit feedback” along with other negotiation moves, such as clarification requests, in contrast to overt error correction that is “explicit feedback.” In implicit feedback, the information about the learner’s linguistic inaccuracy is expressed indirectly whereas explicit feedback provides it directly. Categorizing feedback under this dichotomy causes problems. A recast, for example, can be direct “positive evidence” because, by definition, it is a reformulation of learner mistake(s) into a more target form (Leeman, 2000). For some SLA researchers, provision of a direct model is a form of explicit feedback: Lin and Hedgcock (1996, p.589), for example, described a NS recast as “an explicit correction.” Given that provision of a correct form is a direct form of feedback, defining the recast as implicit feedback is confusing.

Calling recasts “implicit feedback” is confusing also because it contains a logical contradiction: feedback that is “salient” should more likely be “explicit.” Nicholas et al. (2001), reviewing recast research, suggested that recasts which are effective in drawing learner attention must be made explicit in some way, applying “attention-getting” devices (p.749). My findings were consistent with their claim: the recasts delivered in combination with the “marking” and “recruitment” functions for language instruction (e.g., phonological emphasis and repetitions) were more likely to establish a language-oriented ZPD with the students.

Recasts can, therefore, be “explicit.”

Future SLA Research

The definitional confusion is attributed to SLA researchers’ approach to static feedback categorization. Cognitive–interactionist SLA researchers assume that linguistic codes exchanged between individuals, or the “linguistic environment” (Long, 1996; p.413) are a catalyst for L2 acquisition. SLA researchers, therefore, have focused exclusively on discrete aspects of language (e.g., grammatical use of prepositions) in relation to externally observable static human action (e.g., reformulation immediately after an error).⁶²⁾ Those researchers’ focus on linguistic utterances has been independent from the speaker’s intentions for making them. Separating the linguistic product from human activities, however, does not seem to help these researchers explain how such a product relates to the individual’s mental functioning, i.e., learning (see Vygotsky, 1978; Wertsch, 1998). Instead, analysis of SLA process needs to take human mental functioning into account in order to better understand the relationship between the external activities and the transforming internal activities. As Breen (2001) suggests, the analysis of interaction needs to go beyond interaction (i.e., a mechanical analysis of an utterance in a turn transmitted to the listener’s brain in order to trigger language development) to discourse (i.e., an organic analysis of an utterance in a turn transforming the significance of it in collaboration with the listener). The environment in which the target language is used provides opportunities (Swain & Lapkin, 1998) and affordances (van Lier, 2000) for learning.

Sociocultural theory provides useful concepts for understanding a process of learning. In particular, the notions of “self-regulation” and ZPD are valuable. Learning is acquiring the abilities to self-regulate one’s own

62) Selinker (1972) argued for the use of “observable data” in SLA. See Gass and Mackey (2000) for the review of SLA data considered “relevant” for investigation.

action, and this process unfolds in interaction with an external source of knowledge in a ZPD. The teacher's feedback in L2 learning is an affordance for learners to understand their lack of skill in using, and to become able to use, an aspect of language. Explicit feedback usually contains direct information to tell learners what shortcomings they have; it provides the learner with "other-regulation." On the other hand, implicit feedback requires more self-regulatory responsibility in L2 learners.

Investigation into the efficacy of feedback, like recasts, is meaningful when research incorporates the learner's abilities for self-regulation with respect to the feedback activities. For example, Williams (1999) found that proficiency related to learners' self-initiated attention to language. The more advanced in proficiency, the more attentive to language the students were. Mackey and Philp (1998) also found their advanced learner group receiving recast treatment for question formation showed progress in producing accurate questions whereas less advanced learners did not. My findings, however, showed the connection between a learner's proficiency and her noticing of feedback was not straightforward. In Test 1, for example, one of the "more proficient" students, Shoko, did not perform as well as other "intermediate" students; she was one of the low achievers on Test 1. In addition, Tokiko was considered as "the weakest" student among the eight yet she achieved the third highest score on the second test. The learner's proficiency and abilities to self-regulate may not be directly related; thus, this area certainly needs future investigation.

Investigation into feedback provided through verbal interaction requires taking the notion of "goal-oriented activity" into consideration. The data presented in Chapter 6 supported the sociocultural claim that human cognition operates in a goal-oriented activity (Lantolf, 2000; Leont'ev, 1981). Coughlan and Duff (1994) explicated the differences between a task and an activity. A task, i.e., a language learning activity designed to practice aspects of language or used in experimental research to elicit some linguistic data, is a blueprint for potential language learning

or data elicitation. Actual “activity” is determined through the implicit and/or explicit goal negotiation between the participants of the task. Coughlan and Duff (1994) concluded that individual participants perceive and understand a task differently; therefore, the activity is different in each context. Similarly, the participants in my study were found to have defined their own goal-oriented activities in the same event. For instance, the teacher, Hisako, Tokiko, and Shoko defined RE 1104 as content-learning activity; Shoko additionally defined it as a language-learning activity for her own benefit, and Yasuko defined it as a tiring activity in which she did not want to participate. In RE 1202, Ms. Johnson set out the episode as a content-learning activity; however, the students re-defined the situation as a language-learning activity.

Investigation into feedback in relation to goal-oriented activity means examination of a ZPD created through verbal interaction and other mediational means. A ZPD is an arena where a goal-oriented activity, namely learning, occurs. The goal for learning/teaching emerges in the language exchanged during the interaction in the ZPD because utterances mediate human mental function. One’s intention is realized through the functions he/she assigns to utterances. Therefore, the goal of a learning activity can be understood through the analysis of the significance, rather than the linguistic codes, of each utterance between the individuals engaged in discourse.

The relationship between the goal and actions directed to achieving the goal is not fixed. The same action (e.g., recasting) may be adopted for achieving different purposes. Provision of recasts in my data differed in its goal orientation depending on the context. Some “reformulations of the learner’s error” could be oriented to linguistic correction whereas other “reformulations of the learner’s error” occurred as by-products of the teacher’s attempt to give meaning-oriented feedback. Viewed through a notion of goal-oriented activity, learning outcomes can be relevantly evaluated only on the basis of the goal of the activity (e.g., for linguistic correction or for content instruction).

The focus in the investigation into the L2 learning process should be on the agents of this activity. Agency manifests individuality. Reviewing the interaction SLA research, Breen (2001) highlights the too frequent dismissal of individual differences in cognitive research. On the other hand, some SLA researchers who focused on classroom-based SLA find individual learner differences an important empirical concern (Allwright & Bailey, 1991). Ellis (1998b, p.54) emphasizes the ambiguity and inapplicability of experimental cognitive L2 research findings for L2 teachers. For sociocultural SLA researchers, the individual(s)-operating-with-a-mediational-tool is the unit of analysis. The teacher and the learners' perceptions and rationales are valuable data. More studies to document the activities of people learning L2 as agents in particular situations are necessary for a better understanding of SLA processes.

Pedagogical Implications

Teacher's Feedback Strategies

One pedagogical implication from this research into recasts relates to the teacher's feedback practice. On the basis of the interaction hypothesis (Long, 1996), recasts have been advocated as a useful form of feedback for form-focused instruction. However, as discussed earlier, the linguistic reformulation represented in recasting does not by itself trigger the learner's L2 learning. It is the teacher's intention to remedy the learner's mistake that makes a recast potentially effective feedback. When the teacher's recast provided with remedial intention matches the learner's goal for learning the same aspect of language, the feedback becomes effective. Thus, teachers should be aware of why they are recasting.

The teacher who adopts a recasting strategy for error correction purposes needs to take into consideration two matters. First, he/she should consider applying the marking function and the recruitment function to the recast. The functions can be applied through phonological emphasis, pausing, or repetitions. Doughty and Varela's (1998) corrective recasts incorporated repetition of error and recasts with exaggerated

intonation and pausing, for example. Second, the teacher should try to recast a language problem that the learners have recognized. In my data, Ms. Johnson's recasts in the successful REs (1102 and 1106) were the solutions to the linguistic problems the students identified. The students in the Doughty and Varela study were also aware that the tense marking was the target of the corrective recasts.

Recasts can be valuable affordances for the learner. Thus, the teacher's recasting without corrective intention is still useful. However, the teacher recasting with corrective intention secondary to content teaching should understand that his/her recasting is not likely to correct the learner's linguistic problem automatically and immediately. Because linguistically implicit recasts require the learner to make more cognitive effort to understand the linguistic significance, the teacher should also take into account the proficiency of the target students.

Teachers should also be wary of misunderstanding meaning. Because recasts are often reformulations of a learner's utterances based on the teacher's inference of their meaning, recasting may impose the teacher's meaning on the learner. Since language is a means not only of communication but also of thinking, recasts that are not completely congruent with the learners' original intended meaning may be confusing for the learner.

Group Work

The findings from this research support the pedagogical value of small group work. In this research, the students were found to be more attentive in the group activity than in the teacher-fronted discussion. Some students' stimulated recalls showed the students' attention to language was raised by their actual production in the group (see the "Gaps for production" section, pp.77-79). Because attentiveness to language is related to noticing feedback, raising the learners' attention to language is important. Thus, small group work has the potential to facilitate L2 learning.

Group work requires more than putting students together. In order to make the group work a useful learning experience for the students, the teacher may need to consider assignment tasks carefully. In Ms. Johnson's class, the students engaged in different kinds of communicative tasks organized under each of the class themes; they read, thought, and talked about the same theme for five weeks. The task structure was relatively open-ended and it allowed the students to use different levels and features of language. However, the Human Rights theme was conceptually demanding for the students, and this affected the teacher's reaction to the students' errors. Ms. Johnson was more tolerant of linguistic deviation during the week of the Human Rights theme. Therefore, group work teaching may require more considerations from the teacher, especially in the preparation of productive and facilitative language learning themes and tasks, than would be necessary in giving a teacher-fronted lecture; however, the students here were more likely to learn from the group work.

Instruction of Focus on Form

"Focus on Form" or form-focused instruction (FFI) has been discussed among cognitive-interactionist SLA researchers as a pedagogical implication of SLA research. Current research interest into FFI and the discussion of its benefit is limited to the domain of identification of linguistic areas best suited to FFI and the most effective type of FFI. In other words, the researchers are interested in informing L2 teachers with regard to effective and efficient techniques for focusing on form in their classrooms.

Viewed through the sociocultural lens, however, FFI is a possible means for learning how to use an L2 accurately. In other words, FFI is a useful strategy that an L2 learner can use in his/her L2 learning. Therefore, showing the learners how to focus on form may be useful, particularly for adult students. In my data, Ms. Johnson used a scaffolding teaching strategy when she tried to make the students understand the

relationship between rights and responsibilities. She showed how to think of responsibilities in relation to the rights one has. As Ms. Johnson did with the content teaching, L2 teachers may be able to show their L2 learners how and what to pay attention to in their L2 production.

Instruction of English as a Foreign Language

This research was conducted in an EFL context where the learners had little exposure to the natural use of English. Attending to 70-minute English Discussion class twice a week for 10 weeks gave them only 23 hours exposure to Ms. Johnson's English. Of course, Ms. Johnson did not talk with the individual students privately for 70 minutes; thus, their actual exposure to English was incredibly limited.

Learning a foreign language thus requires individual learners to take an active role in and engage with their learning. Given that learning requires attention, as Schmidt (1995) insists, attentive students are most likely to succeed in the long run. In fact, Tokiko and Shoko, who provided me with much reflection on different REs, showed improvement in Test 2 from their results in Test 1.

Teachers in EFL contexts should understand that the students' exposure to the target language is extremely limited and that expecting subconscious or unintentional learning is unrealistic. In order to facilitate EFL learning, teachers need to provide the learners with appropriate tasks to force the learners to pay attention to language. For instance, Vandergrift (2003) provided the college students studying French as a SL with listening tasks, which strategically manipulated them to pay selective attention to the words and information they predicted to hear in the listening material. In a study conducted in a Japanese EFL context, Ikeda (2005) provided the college students with explicit reading strategies and instructed them what to pay attention to in order to comprehend reading passages accurately. Providing learners with explicit strategies for understanding what to pay attention to in the different stages and/or channels of EFL learning would also be helpful.

Limitations

This research contains several limitations. The first limitation was the assessment instrument. Because I relied on the naturally occurring feedback events for assessing the students' learning, designing a pre-test was not possible in my study. A pre-test with linguistic items which might not be focused on or treated in an actual lesson would not have been useful in my study. In addition, Swain and Lapkin (1998) found that conducting a pilot study using the same task with a similar population to the target participants did not guarantee similar data for producing an actual tailor-made post-test.

My assessment design without a pre-test, however, made my claim for "learning" based on GJ Test 1 weak. Without being certain that the test items were unknown to the students prior to the treatment (i.e., recasts), the Test 1 outcome cannot be directly attributed to the students' recast experience.

One possible means of tracing a learner learning something unknown through recasts may be by developing a tailor-made test based on the particular student's mistake (i.e., unknown item) and the recast which treated that mistake (i.e., treatment). Although this approach to assessment may allow a pre-test and post-test comparison, the effect of recasts for investigation is limited to interaction between the teacher and an individual student rather than the teacher and students in the classroom, because in the classroom, individual students speak out in different degrees and receive feedback in different frequencies.

Similarly, the learning assessed through GJ Test 2 requires caution in its interpretation. As discussed in the GJ test results section (p.70), the students were exposed to the REs for the second time through the video viewing. Although there was an interval (approximately three to nine weeks) between the video viewing and the second test, this research design made it ambiguous whether the second test result showed (1) the retention of initial learning from the original exposure to the recast, (2)

the effect of the second viewing of the recast, or (3) the effect of talking about the recast episode as they watched the video. In the framework of sociocultural theory, however, human development is dependent on one's historical experience and making isolated cause-effect relationships is not meaningful (Smagorinsky, 1998).

Finally, this study was a small-scale study with only one NS teacher, eight Japanese EFL students, and only 25 REs observed. The research context contained many other variables, such as the college curriculum, the EFL educational system in Japan, and the participants' personal experiences about teaching and learning English. My findings might have been influenced by these other variables. Therefore, my findings cannot be generalized to other EFL/ESL situations; however, my exploration made the complexity of recasts and classroom interaction evident. More studies of this kind, focusing on participants and understanding them and their teaching/learning activities from their perspectives in different contexts are needed for our better understanding of recasts, feedback and second language learning.