CHAPTER 4

RESEARCH RESULTS AND DISCUSSION

In this chapter, the research questions are presented and reviewed to link to the quantitative and qualitative results. These results are explained below and then presented in tables and commentary form following relevant research questions.

Ouantitative Results

Question 1: "To what extent do learners modify their ill-formed verb structures in repeat task performances, having participated in collaborative dialogue?"

To unravel the answer to this question the researcher examined the transcripts of the task performances. These task performances involved the learner produced story telling sessions. They also involved learner opportunities to correct ill-formed verb structures they noticed on transcripts derived from these story telling sessions. First the researcher examined the transcripts of the story tellings produced by each learner and counted places where verb structures appeared or should have appeared on the transcript of these performances (for example, if a learner said "he headache" the space between "he" and "headache" was counted as 1 example where verb should appear). The places where verb structures appeared or should have appeared were labeled "verb contexts" and were reported as such in the tables clarifying the results found. Next, the researcher counted all

the verbs that were well-formed. Well-formedness also includes verbs used consistently in the same tense. For example, from the first episode onward, both learners, in reviewing the transcript, corrected their present tense verbs to past tense verbs. So, if a learner failed to use these verbs in the past tense where they where needed to be consistent, the researcher did not count these as well-formed verb structures. Finally, the researcher was interested in finding out the percentage of well-formed structures used to verb contexts, in order find out if there were improvements in modifying verb structures over the three sessions. To get the percentage he divided the verb contexts by the number of well-formed verbs used in each session. The key piece of data the researcher found, in answer to question 1 was that each learner increased her percentage of well-formed structures from the first session to the last session. This information is presented below in the tables. Table 1 first explains the number of verb contexts that appeared on the transcripts of each story telling performance session.

Table 1. Verb Contexts (places where verb structures appeared or should have appeared on the transcript)

Learner 1, Pen	Learner 2, Aum
28	27
44	22
39	28
	28

From these contexts, what the researcher wanted to find out was how many well-formed verb structures were used for each learner. The well-formed verb structures were counted from these contexts and reported in table 2, below.

Table 2. Well-formed verb structures used in story-telling sessions

	Learner 1, Pen	Learner 2, Aum
Session 1	10	5
Session 2	23	8
Session 3	17	10

Next the researcher sought to find the percentage of well-formed structures used in each session by each learner. To find this percentage, the verb contexts as reported in table 1 were divided by the well-formed verb structures as reported in table 2. This data is reported below.

Table 3. Percentage of well-formed verb structures found in each story-telling session

	Learner 1, Pen	Lear	ner 2, Aum
ession 1	36%	1	8%
ession 2	52%	3	6%
ssion 3	44%	3	6%

The data reveals that Pen improved by 8 percentage points from sessions 1 to 3, –from 36 percent in session 1 to 44 percent in session 3. Her biggest jump in improvement was from sessions 1 to 2, moving from 36 percent to 52 percent. In session 3 she back slid to 44 percent. However, Lantolf and Thorne (2006) state that backslides are actually "an expected aspect of the developmental process" (p.282), so we should view them as positive signs of learner growth.

The data for Aum reveals that she doubled her percentage of well-formed verb structures used from the first to the second session and maintained this level in session 3. The large jump from first to second performances is not unexpected given that the tasks

were new to the learners in the first session. Once task familiarity has been established then it is likely to wash into the performance results in the next session, to some degree. Overall, it appears that Aum improved by 18 percentage points from the 1st to the 3rd sessions, though the percentage remained stable from sessions 2 to 3.

To further understand to what extent the learners modified their ill-formed verb structures in repeat task performances, the researcher was interested in finding out to what extent the learners' noticed and modified their ill-formed verb structures in writing, after examining the transcripts of the story telling sessions. To find this out, the researcher first examined each of the story telling transcripts and counted the number of ill-formed verb structures as well as places where verbs should have appeared. These are labeled together as "ill-formed verb structures." This information is tabulated in table 4, below.

Table 4. Ill-formed verb structures found on the transcripts of story-telling sessions

	Learner 1,Pen	Learner 2, Aum
Session 1	18	22
Session 2	21	14
Session 3	22	18

Next, the researcher wanted to find out how many of these ill-formed verb structures were corrected by each learner, having examined the transcript. These corrections were made by each learner just prior to the negotiation sessions. These negotiation sessions occurred two days after each story telling session. In these negotiation sessions, the learners were first left alone for 10 minutes and instructed to

correct as much of the transcript as they liked. To discover to what extent the learners modified their ill-formed verbal structures in writing, the researcher examined the learner-corrected transcript of the story telling performances and first counted the learners' corrections. Only the corrections that were well-formed were counted as correct. This information is recorded below in table 5

Table 5. Number of well-formed written corrections to the transcript

	Learner 1, Pen	Learner 2, Aum	
Session 1	11	13	
Session 2	13	9	
Session 3	17	11	

The next stage involved finding the percentage of modifications that were made as the numbers alone do not suffice to explain to what extent the learners modified their ill-formed verb structures. To find the percentage of modifications of ill-formed verb structures, the number of ill-formed structures in the transcript was divided by the number of well-formed corrections of these originally ill-formed structures. Or in other words, the data from table 4 was divided by the data from table 5. This information is reported in table 6, below.

Table 6. Percentage of ill-formed verb structures corrected in writing

	Learner 1, Pen	Learner 2, Aum
Session 1	61	60
Session 2	62	64
Session 3	77	61

The results above show that Pen improved 16 percentage points in the amount of ill-formed structures she was able to notice and correct from sessions 1 to 3. Her percentage change from sessions 1 to 2 was only 1 percent, likely in part to task familiarity. The bigger jump of 15 percentage points from sessions 1 to 2 is likely due, in part, to having participated in collaborative dialogue. Just prior to the third session she had participated in collaborative dialogue twice, which is likely to have been a contributing factor in her improvement.

The results for Aum are not quite as positive. She improves 4 percentage points from sessions 1 to 2, likely in part to task familiarity effect, but then falls back in session 3 by 3 points. In total, from sessions 1 to 3 she improves only marginally, just one percentage point. This score is consistent with her oral performances where she improved from the first session to the second but only maintained the level of growth she had achieved in the previous session.

In summary, Pen improved in her use of well-formed verb structures in story-telling sessions by 8 percent. In noticing and correcting her ill-formed verb structures found on the transcripts of these story telling performances, she improved by 16 percent from the first to the last session. Aum improved by 18 percent from the 1st session to the 2nd session in oral story-tellings and maintained the same level from the second to the third

sessions. Overall, she improved by 18 percent. In noticing and correcting in writing her ill-formed verb structures on the transcript, she improved just 1 percent from the fist session to the third session. The extent to which the learners improved from session to session and in comparison to each other is correlated with results found from questions 2 and 3. Question 2 is provided next followed by a discussion of the results and tables to clarify these results.

Question 2: "To what extent do learners move towards self-regulation in correcting ill-formed verb structures in repeat task performances?"

Recall that self-regulation refers to reliance on the self and/or movement away from reliance on others. So here, the researcher sought to find the degree to which the learners moved towards reliance on the themselves and away from the tutor. To find this out, he first counted the number of learner corrections of ill-formed verb structures the learners found in the transcript. As mentioned, the learners corrected the errors they noticed on the transcripts immediately preceding the negotiation sessions. These learner corrections are referred to as 'self-corrections' here. The researcher counted the number of self-corrections and then multiplied the number of these self-corrections by 5 to find the total self-correction score. The reason the number 5 is chosen is that 5 represents ability to correct and make changes with no intervention from the tutor on Aljaahfreh and Lantolf's 5 point scale (see figure 1, introductory chapter, p.12). Table 7 below shows the total score found for self-corrected ill-formed structures. To the right of these scores, in parentheses, is the number of ill-formed structures corrected.

Table 7 Total self-regulatory score of written, self-corrected verb structures

Learner 1, Pen	Learner 2, Aum
55 (11)	65 (13)
65 (13)	45 (9)
17 (85)	55 (11)
	55 (11) 65 (13)

These numbers above tell us about the number of verb structures the learners were able to correct on their own. But many verb structures were left uncorrected by the learners. The researcher was also interested in finding out to what extent the learners were able to move towards self-regulation of the remaining ill-formed structures. So the uncorrected structures were then negotiated between the tutor and the learners in collaborative dialogue and recorded on tape. The tutor/researcher listened to these negotiations several times to be certain of what he was hearing and then transcribed each episode in each session. After transcription, each episode of negotiation over an ill-formed verb structure was examined and given a regulatory rating (in accordance with Aljaahfreh and Lantolf's 5-point scale) Since these remaining ill-formed structures were not corrected by the learner they could not be given a 5 on this scale, so each episode was rated between 1 and 4, with 4 meaning ability to regulate or modify ill-formed structures with minimal or no obvious help. A score of '1' meant the learner was unable to notice and correct her ill-formed structure, despite assistance from the tutor.

Some episodes were not counted, however, as there were cases where the learners' utterances were not intelligible enough on the tape or their pronunciation was not clear. But the number or episodes that were clearly heard after several listening attempts were counted and given a rating. The results are given below in table 8 where the number of negotiated episodes is multiplied by a regulatory rating score in accordance with guidelines provided by Aljaahfreh and Lantolf's 5 point scale. The total score of negotiated episodes, in each session, is given for each learner followed by the number of episodes in parentheses.

Table 8. Regulatory score of negotiated episodes. Total score of episodes followed by number of

	Learner 1, Pen	Learner 2, Aum
Session 1	14(5)	21.5 (7)
Session 2	26.5(8)	12(4)
Session 3	13.5(4)	13 (4)

To find the total self-regulatory score, the researcher then added the scores that were obtained through negotiation, as reported in table 8, to the total scores for independent problem solving or complete self-regulation, as reported in table 7. This data is presented in table 9 below.

Table 9. Sum of regulatory scores: total negotiated episodes' score + self-corrected scores.

Learner 1, Pen		Learner 2, Aum	
Session 1	69	86.5	
Session 2	91.5	57	
Session 3	98.5	68	

Finally, the researcher needed to find a mean score of the sum of the negotiated episodes and self-correction scores, so he added the number of learner self-corrections, in parentheses in table 7, to the number of negotiated episodes, in parentheses in table 8, and divided the sum of the regulatory scores in table 9 by that sum. This is presented in table 10 below

Table 10 Mean regulatory scores

	Learner 1, Pen	Learner 2, Aum	
Session 1	4.3	4.3	
Session 2	4.4	4.4	
Session 3	4.7	4.5	

The data reveals that Pen improved by .4 points in her ability to self-regulate. The biggest change is from the second session to the third session, where she improved by .3 points. The change in sessions 1 to 2 was only a marginal - .1 points and perhaps was only due to task familiarity. The larger jump from session 2 to 3 is also partially due to increased task familiarity but that is probably not the whole story. Recall that in Pen's story-telling in her third session, she actually fell back 8 percentage points. But then when she corrects the errors from the transcript of this performance two days later, she is

able to notice 15 percent more errors than she had previously. Correlated to this large jump is her performance in the final negotiated session, which immediately followed her attempt to correct all her errors on the transcript. As mentioned, in this final negotiated session, she improved by .3 points, a much bigger jump from sessions 1 to 2.

Aum's increased degree of self-regulation was more modest, moving from 4.3 to 4.4 to 4.5. These are fairly small changes, though they do show some marginal progress. The pattern is also fairly regular, with just a .1 point change from sessions 1 to 2 and from 2 to 3. Her marginal improvement is possibly correlated to the fact her oral performances from sessions 2 to 3 remained constant and that her ability to notice and make changes from the transcripts fell back marginally from sessions 2 to 3. To provide further clues to the reasons for these results we will turn to the next questions in the study.

Question 3: "To what extent is self-regulation of well-formed verb structures maintained after a delay of one month?"

To answer this question, the learners took part in a final, delayed story-telling performance a month after the last negotiation session. The researcher was trying to discover to what extent the learners maintained their degree of self-regulation after a one month period where the learners and tutor were not in contact. The researcher reasoned that one gauge of self-regulation would be the extent to which the learners would use well-formed verb structures in another story telling performance. To discover this data the researcher recorded and transcribed these last story—tellings and counted the verb

contexts on the transcript and then the number of well-formed structures the learners used.

This is reported in table 11, below.

Table 11.4th story telling session: verb contexts and number of well-formed verb structures found

Verb contexts		Number of well-formed verb structures	
Learner 1, Pen	41	28	
Learner 2, Aum	29	-11	

Following this stage, the researcher needed to find the percentage of well-formed structures used by each learner. This was done by dividing the number of verb contexts by the number of well-formed verbs structures used by the learners. This information is reported in table 12 below.

Table 12. Percentage of well formed verb structures used; verb contexts divided by number of well-formed verb structures found.

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Learner 1, Pen	68%	
Learner 2,Aum	38%	

Pen used well-formed verb structures in this last story-telling 68 percent of the time. This was a jump of 23 percent from her session 3 oral story-telling performance, a month earlier. One contributing factor to this increase, could be the increase in her self-regulation score, which moved from 4.4.to 4.7 from sessions 2 to 3, suggesting a positive correlation between collaborative dialogue, improvement in self-regulation, and improvement in correct use of verb structures.

Aum's final delayed story-telling only improved by 2 percentage points from the last story-telling given a month before. Interestingly, as recorded in table 6, her ability to

notice and correct ill-formed structures in writing on the transcript actually fell back. However, she was still able to marginally improve her ability to self-regulate, as reported in table 10 after having participated in collaborative dialogue. As mentioned, she improved .1 point in the last session and .2 points overall. It is likely this small change was a contributing factor to her marginal improvement on the final, delayed performance. To provide more clues into these reasons for these results we need to go beyond the quantitative data here to qualitative data, leading to question 4.

Qualitative Results

This next section discusses the qualitative results. These results are in response to the final research question in this study:

Question 4:"What are the plausible, sociocultural reasons to explain the extent to which learners move towards self-regulation?"

To answer the final research question we need to look at the commentary and poststudy interview sections. The commentaries are preceded by illustrative episodes from the transcripts, where the learners and the tutor negotiated the learners' ill-formed verb structures to produce well-formed, target, verb structures. The post-study interview questions and answers follow the commentaries.

Each commentary discusses sample episodes of dialogue between the tutor and the learner. In the commentaries, all the plausible reasons for progress, or regress, in self-

regulation will be explored; these reasons connect to what extent microgenetic or macrogenetic growth - the degree to which learners noticed and corrected errors in response to the fine-tuning of help from the tutor - occurred; other sociocultural factors such as face, confidence, and the development of the relationship between learner and tutor are also explored. Finally, factors also include linguistic issues such as the difficulty of the target structure under negotiation and in some cases how the difficulty of the particular structures interfaced with the learners' movement towards self-regulation. Following this section, the qualitative data from the commentaries will be summarized in tables.

The commentary section begins with illustrative examples of the episodes that took place between learner 1, Pen, and the tutor. Following these episodes, commentary on the episodes is provided.

Letter and number grades are given to code the episodes. The letter grade is in accordance with alphabetical ordering so that the first episode of discussion is labeled 'A', the second 'B,' and so forth. The number following the episodes indicates in which sessions the episodes occurred. 'B1' means the second episode of session one, for example.

Learner 1, Pen.

Session 1

Episodes B1 and C1

The story (see Appendix A) under discussion is about a man who was mugged twice as he was walking home from work. In these episodes, the past 'copula' is the target item being negotiated. These episodes are highlighted as they show partial microgenetic growth.

Episode B1:

- 26 M: Would you change anything here? [points to first line]
- 27 P: Tense
- 28 M: You would change the tense? So what would you change the tense to?
- 29 P: Past tense.
- 30 M: Okay
- 31 P: [inaudible].. "A man who was a doctor."
- 32 M: Good.

Episode C1:

- 33 M: So, in this sentence here would you change anything?...this sentence here?
- 34 P: "Suddenly, there is" [inaudible]
- 35 M: Okay::: is that right?
- 36 P: No, "there is a girl who want to attack him on his head"
- 37 M: Okay, okay, umm, I LIKE that use of *suddenly* [tutor's voice raises a little in enthusiasm, learner smiles]. If you wanted to change anything in here, just this [points to "there is"], this here.... how.about this?...is there anything?
- 38 P: // "was"//
- 39 M: about the tense. Okay, "was."

Commentary

In these episodes, Pen is able to notice and correct her error fairly quickly. One reason for this could be that the target structure, the copula 'was', is very familiar to her. Another reason could be that she and the tutor have already engaged in one exchange previously, so the ice has been broken and greater familiarity with each other has developed. Notable is the tutor's support of Pen's sense of confidence in episode C when

she adds the lexical item, "suddenly" to the story, increasing its discoursal richness. The tutor could have ignored this item, as an argument could be made that it would have been better to maintain focus in scaffolding only those items under study. But considering that the first episode, episode A1, did not result in a successful correction (which possibly could have resulted in a loss of face) the tutor probably judged that it was important to support Pen's sense of confidence as well as a her sense of positive face (that is as a competent learner of English) when the next opportunities arose.

What is also salient about episode C is that once the tutor has directed Pen over to the problem, to the phrase 'there is', she is able to anticipate the tutor's assistance and also correct her error before the tutor has finished speaking. This demonstrates partial microgenetic growth. On the one hand, Pen needed redirection and narrowing down to spot the error. But on the other hand, her ability to anticipate demonstrates microgenetic movement.

Episode B is given a rating of 3.5 since Pen noticed the problem right away and, at the whole line level, and just needed one more assist to deliver the target form. Episode C was given a 3 since she needed a little more assistance in reaching the goal.

Session 2

Episode B2

The story for this session was about a man who had broken into a home. The pictures showed him putting various things into his bag, then helping himself to things to eat from the kitchen. In the end, he falls asleep in an upstairs bedroom and is awakened by police waiting at the foot of bed he is sleeping him. Interestingly though, Pen does not interpret

the story this way – she thinks the man is cleaning up his house. He falls unconscious in his bedroom, and after not being heard from for awhile, a neighbor gets concerned and calls the police. This demonstrates an important sociocultural claim that learners bring their own schemas, socially or culturally motivated, to bear on classroom tasks and activities. Tasks do not flow unidirectionally, with the teacher or tutor solely in charge of design, interpretation, or scaffolding. Learners collaborate in these processes to achieve their own goals, sometimes in unexpected ways. In this case, the tutor could have pointed out another way for Pen to interpret the story but he chose to accept her interpretation, to support her sense of confidence as well as to not to impede her (so as to avoid negative face) and to maintain focus in correction on targeted items.

In this episode of the 2nd session, the target item Pen corrects is 'cleaning.' Her ability to notice and correct here shows progress in self-regulation.

Episode B2

- 13 M: Okay, and then in this next part: "And when he cleaning, he felt hungry and he wanted to eat something and then he wented [performance error that tutor repeats back to the learner] to the kitchen and found something to eat." [underscores line] Would you change anything in there?.....
- 14 P: "When he"..."When he *had* cleaned already he felt hungry and he.. went.. went..he want to eat something and then he went to the kitchen to find something to eat."

Commentary

Pen's correction after only one assist displays a move towards self-regulation. This demonstrates microgenetic growth, as she is able to pick out the problem in a haystack of several lines of language, demonstrating co-constructing in directing her focus. For these

reasons, the episode was rated a 4. In narrowing her focus to the first tense problem that arises, Pen and tutor appear to be gaining in mutual understanding in prioritizing attention. Interestingly, Pen chooses a past perfect construction in favor of modifying the item to a past progressive construction. One possible explanation for this might be that in previous episodes she had demonstrated an interest in modifying her language to increase complexity. Perhaps she considers the past perfect to be more complex than the past progressive so she wants to demonstrate her knowledge and ability. Related to this point is that Pen modifies a correct structure to another but different construction, changing 'and found' to 'to find.' Here, she inserts an infinitive of purpose, perhaps wanting to demonstrate her competency in the use of this rule. Pen then is combining her own goals with the tutor's goals - correcting her errors, asserting competency, and increasing complexity. Once again, this demonstrates a salient sociocultural claim that learners do not just react to input from the tutor, in accordance with input/output models of learning, but bring their own knowledge, interpretation, and motivation into language learning interactions.

Episode F2

This is the last episode of session 2. Again the past copula is the focus. This episode demonstrates Pen's growth in self-regulation.

- M: And then this part here [starts to point to the line beginning with "There is"]
- 47 P: // "There was a man who want"//[learner goes on but not clear enough]

Here, Pen is able to correct her error, the tense of the copula, with only one assist so the episode would be rated a 4 on the regulatory scale. Of note is that Pen anticipates the tutor's help and is able to notice and correct her error before the tutor has completely finished gesturing. This anticipation demonstrates that Pen is maintaining some of the macrogenetic growth she had gained earlier, at least in regards to the use of the copula. It is noteworthy that this is the second occurrence of this phrase, "there is", in this session. Additionally, this two-word item has now occurred three times over two sessions and the verb, "was," has occurred five times. Its frequency of appearance can explain Pen's progress on the regulatory scale.

Session 3

Episode B3

This was the last session involving negotiation of forms between Pen and the tutor. The picture story was about a woman who bought a parrot and sent it to her mother as a birthday gift. But her mother cooked and ate the parrot for dinner. This first episode of this session involves negotiation over the auxiliary verb, 'do', and demonstrates Pen's maintenance of microgenetic and macrogenetic growth.

26 M: "And then Sarah felt shock that her mother do it." Is there anything here you would change?

27 P: "Did it."

Commentary

Pen notices one of her errors, the auxiliary verb 'do', and corrects it immediately, earning a 4 on the regulatory scale. Additionally, she is able to notice the error at the whole line level, maintaining the macrogenetic and microgenetic growth she had developed previously. However, she ignores the problem that "shock" is missing the participle ending. A few possibilities are worth exploring here. The consonant cluster /kt/ at the end of the word "shocked" is a problematic one for Thais. Skipping over this might have just been a way to avoid dealing with a common problem. Later, the tutor is not certain if Pen is pronouncing this ending and asks her to repeat it. In conclusion, Pen might notice and be aware of problems in grammar but pronunciation issues could suspend or interfere with attempts at correcting the error, for reasons of lack of confidence and/or concern for loss of face. This demonstrates how sociocultural factors interface with mastery of the linguistic system.

Episode C3

This episode is primarily highlighted because it demonstrates Pen's microgenetic growth in noticing and correcting an error - the verb "come", which originally she used in the present tense.

- 28 M: Good okay.... [Reads and points to line]. "And when her mother talked with her already she come to sit the table dinner and ate the parrot and laugh and felt happy on the table because she talked with Sarah." Anything in this part you would change?
- 29 P: [points to "And."]
- 30 M: Well, I think it's okay to start with "And." Anything else?
- 31 P: [writes "returned" over "come"]
- 32 M: Okay, so you would change that.

Commentary

In this episode, the tutor reads off a very large chunk of language to see how well Pen is able to pick out the errors from the haystack of possibilities. Initially, Pen points out the first item she comes to, "And." It is likely she feels it is incorrect because in some formal writing books, it is a principle that starting a sentence with a conjunction is either bad style or is just wrong. The tutor redirects her from this move as this is a speaking exercise, so writing style is irrelevant here. Interestingly, Pen then recognizes that "come," is a present tense verb but must be in the past. But instead of correcting it to the past, Pen provides a different past tense verb, "returned," with a similar but more precise meaning, namely "came again." So, Pen corrects this to a past tense form but adds precision to the meaning of what is happening in the story. This episode should be graded a 3.5 then as even though she did not notice the problem immediately, she was able to notice it after only one extra prompt in a very large chunk of language. The fact she was able to notice the error in a larger chunk of language shows maintenance of microgenetic and macrogenetic growth.

Additionally, not only did Pen notice the error as a grammatical problem she also noticed that the lexical item, "come," was not as precise as it could have been; Pen takes the initiative to change the verb in order to add precision and the tutor supports this move, to support her sense of confidence and ability to take charge of her learning. This demonstrates further improved cooperation and tacit agreement between Pen and the tutor with the possibility that the first buds of a new role relationship are blossoming, where the learner improves her status in the relationship and collaboration can begin on a more equal footing. It is noteworthy, in connection to this possibility, that the tutor

accepts Pen's new choice of a lexical item, tacitly agreeing that it is a better choice, allowing Pen to take more responsibility in the creation of the story.

At this point, we should probably entertain other possibilities. Pen simply was not entirely sure of what the past of "come" was or was not entirely confident in how to pronounce it. These possibilities did not occur to the tutor at the moment the issue came up, which could explain another reason why he neglected to focus on it in the moment or later in the episode. Finally, it is interesting that Pen chose to write "returned" rather than speak it, the first time she makes this correction. It could be that she is not entirely confident of how to pronounce it in the past, as other past tense forms were problematic for her earlier (though later in the session, after the tutor accepts her choice, the learner does speak out and elaborate on how it is to be used). Or it could be that in choosing to write it, she is tacitly suggesting that this choice is final. If she had spoken it the first time, the tutor could have more easily ignored it, but once it was on the page, it took on a connotation of permanence. One final possibility remains; writing here is a way for the learner to co-construct the maintenance of focus, considering that what she is dealing with is a very large chunk of language. If so, then Pen is sharing or co-constructing the job of scaffolding with the tutor, providing further evidence that a new role relationship is sprouting. These possibilities are not mutually exclusive, however; two or more of them could be co-occurring.

Episode D3

This is the last negotiated episode of all three episodes for Pen. Here, without any explicit assistance she is able to notice an error, "laugh", used in the present tense, and

change it. This episode highlights Pen's increased sense of participation or mutuality (see Storch in discussion of role relationships in this study, p.13) in the relationship.

- 33 M: Okay, so you would change that.... "come" to "returned"
- 34 P: "He...she..returned to sit..."
- 35 M: Good, "She returned to sit...at the dinner, at the dinner table" okay, "she returned to sit at the dinner table.. and ate the parrot" Okay
- 36 P: "And laughed"
- 37 M: Good, "And laughed." Good

Commentary.

This episode demonstrates the role of repetition in collaborative dialog. Repetition is an important element in interaction, creating support for what each conversation partner is saying, demonstrating that the other partner is listening and is interested. The tutor repeats back to Pen what she had said or marked already as correct and Pen supplies the necessary correction of a past tense form for "laughed" anticipating the tutor's next assist, taking charge of correcting her error, and bolstering the new role relationship that had begun to develop in earlier episodes. The tutor supports Pen's increased sense of equality and positive face, remarking 'good!' with emphasis. Finally, Pen did not need this error narrowed down for her, suggesting macrogenetic growth over the three sessions. This episode would be rated a 4.

This concludes the commentary section for learner 1, Pen. In summary, Pen demonstrated progress towards self-regulation for the following reasons: Pen and the tutor improved their ability to collaborate for mutually satisfying results; the help that was offered became more finely tuned to Pen's needs, meeting her in her ZPD; the first

episode of session 1 did not result in a successful learner correction and possibly Pen felt a loss of confidence and/or face – to recover this possible loss the tutor tried to work towards a delicate balance between supporting Pen's sense of confidence when she went off the path to work towards here own goals and maintaining focus on the target; finally, the tutor seemed to grasp that Pen was ready to shift the role relationships to allow for an increase in equality and mutuality.

Learner 2, Aum

Session 1

Episodes A, B, and E

The same stories in the same order were given for each learner, so this first session with Aum, also involves the story about the unlucky man who was mugged twice on his way home from work. These episodes are included together as the same structure and lexical item occurred in one session, 'brought', and we are able to see Aum's partial progress in movement towards self-regulation in correcting the item.

Episode A1

- 1 M: Is there anything you would change in this sentence? [Points]....Anything you would change in this sentence?.... "He brang a club and hit his head again?"..Is there anything you would change there?
- 2 A: "He brang a club".... I change "bring a club."
- 3 M: Yeah, yeah, so you changed that. But would you change..would you change *this* [points to "brang"] to something?
- 4 A: I change from "he bring a club" to "he brang a club"
- 5 M: Okay, um, do you know a different word... other than "brang"?
- 6 A: "He brang a club"

- 7 M: How about..... do we say "bring" [in this case is it the appropriate choice?]? .. "Bring" is present tense, uh what's the past tense of "bring?"
- 8 A: "Brang."
- 9 M: Is it?
- 10 A: "Bring, brang,brung."
- 11 M:... Okay,
- 12 A: [inaudible]
- 13 Yeah, okay, I think the standard though is not, is not this...um..."brought"
- 14 A: /brouch/
- 15 M: /brought/
- 16 A: /brought/
- 17 M: "brought," right.
- 18 A: b-r-o-u-g-h-t?
- 19 M: Yeah

Episode B1

- 20 M: So, this...you want to change this again, right [points to brang]
- 21 A: "brought"?

Episode E1

- 53 M: Um, once again, the past tense of this [points to line, "brang up a key"]?
- 54 A: "brought" [confidently put]

Commentary:

In episode A, the tutor ends up supplying the standard past tense form of "bring" to Aum, after intervention failed, so this episode would be rated a 1. Episode B immediately follows episode A, so it is not difficult to see why Aum was able to correct the problem very quickly. But notice that her correction is in the form of a question, demonstrating that she is not certain of her choice. However, in episode E, she confidently asserts that it

is the correct form, demonstrating that she is on the road towards full internalization of this form.

In episode A, intervention failed for a few likely reasons. This is the first discussion session between Aum and the tutor so it is likely that a degree of comfort and mutual understanding has not been achieved yet. This might be one reason the tutor's assistance is probably not very helpful. He seems very uncertain initially with what to do with the learner's choice of verb. He starts to ask if there is a different verb she could use here but then changes his mind in midstream to focus on the standard past tense of 'bring.' It seems he is debating over what to do with her interlanguage choice of past tense for the item "bring." "Brang," is a non-standard and acceptable form in some dialects of English, so the tutor was probably feeling an inner conflict about correcting it. Additionally, Aum appears to be overgeneralizing a rule, based on the pattern of some English verbs that follow the /i-a-u/ sequence such as "ring, rang, rung." So, on the one hand, Aum is demonstrating signs of language acquisition through overgeneralization of a rule. But on the other hand, the tutor wants her to supply the standard form. Perhaps the tutor's inner conflict is apparent to Aum who initially seems confident with her choices, leading to uncertainty in her as well. At the end, the tutor seems to just resign and hand Aum the answer. Possibly other steps (the use of analogy, for one example) could have been taken that would have led the learner to choose the standard form, "brought", as at the end she does not seem unfamiliar with this form.

In episodes B, Aum makes the correction after just one assist though the tutor narrows the problem down for her to the item level and explicitly suggests it needs changing. For this reason, the episode is rated a 3.5; this could not be rated a 4 even though she corrected it in one prompt.

In episode E, while it is encouraging that Aum confidently corrects her error after one assist, we can only say that partial microgenetic growth has been achieved as the tutor rather explicitly pointed out that a change to the past tense was needed and the hint that is given for where to look to correct was fairly narrowly targeted. For this reason the episode also is rated a 3.5. Nevertheless, the fact that she is able to confidently assert the target structure after two other items had been negotiated demonstrates progress in self-regulation.

Episode C1

In this episode, after being reminded of a more appropriate verb to use - 'get' instead of 'feel' - Aum is able to make the change with some assistance – the assistance is more finely-tuned to Aum's needs here.

- 22 M: How about this: "He: he: headache." Do you want to change something there?

 "He headache"
- 23 A: "He felt a headache."
- 24 M: Is this right, "felt?" "He::"
- 25 A: "He felt"
- 26 M: What did we change this to?
- 27 A: Oh [smiles]. "He get a headache"
- 28 M: Okay, and would you change that to anything?
- 29 A: "He get"
- 30 M: Uhh"get"..
- 31 A: "He get a headache"
- 32 M: There's something wrong with the tense here...

33 A: Oh [chuckles]. "He got a headache."

Commentary

The salient points here are Aum's paralinguistic devices for co-construction, to control frustration and maintain face. Aum smiles when she remembers that she and the tutor had already discussed using "get" instead of "feel" as the collocation of "headache." She again laughs later when she remembers that "got" is the past simple of "get" and this is what the tutor had been hinting at earlier. Since previously she had produced "got" after just one assist, perhaps her laughter is a form of face saving: "Oh, I knew that, silly me." It also shows a certain level of comfort with the tutor, suggesting that this is the start of a sense of mutual understanding between the two parties. The tutor in turn, has improved in fine-tuning his help, appearing more patient to wait for Aum to supply the answer, providing more clues as needed when previous ones failed. Aum supplies the answer after the tutor narrows down the problem to "something wrong with the tense," so this episode would be rated a 3.

Session 2

Episode A2 and B2

These episodes involved a discussion over Aum's ill-formed verb structures in the telling of the story about the man who broke into a house. It is interesting that Aum also interprets the story differently from the official version. In her version, the man is packing up to move out. Once again, this demonstrates that learners bring their own sociocultural interpretations to tasks and classroom activities. In episode A, the item

under negotiation is the past copula, 'was.' In episode B, the structure involved is the use of the infinitive, 'to cook.' They are included together to showcase scaffolding moves and Aum's reaction to these moves.

Episodes A2

- 1 M: Okay, let's have a look at this.um.this is good, "picked up." Mm, this is good, "moved to the kitchen." Okay, is there anything else in this you would change?
- 2 A: uh, "There is a young man, he was keeping a picture, put on into a bag."
- M: Okay, but this is good [pointing to original sentence]. This is okay, already. So you have, "There is a young man picked up a picture and put on into a bag and then he went to the kitchen at his home." So this is good, "picked up." And then you changed "go" to "went." That's good. Is there anything else in this part you would change?
- 4 A: "He went"?
- 5 M: This is good, [inaudible] "he went" But is there anything else?
- 6 A: He "pick"
- 7 M: In this first part [underscores first line]
- 8 A: um, I'm not sure
- 9 M: There's something here in this segment
- 10 A: "There is a young man..." Oh! [smiles] "There was a young man."
- 11 M: Good, Alright, very good.

Episode B2

- 12 M: Okay, then let's look at this next section, "He picked up the cheese, took it out from refrigerator in order to cook it" Okay, this is good, "he picked up.. the cheese and he took it out from uh refrigerator" Okay anything else you see in here that you would change? [tutor underscores whole line]
- 13 A: mm "out from refrigerator for cooking."
- 14 M: Okay, you could change that, right, "for cooking." Okay, If you left that "in order to," is there anything you would change?.....At first you put, "in order to." That's okay. So, if you left that as "in order to," is there anything else you would change?

Commentary

These episodes are noteworthy for the demonstration of a number of scaffolding moves and the improvement in the fine-tuning of help to Aum's needs. The tutor begins episode A by pointing out to Aum her well-formed verb structures. This move was designed so that Aum would not over-correct or shift focus to adding in additional language; it was also designed so that she would feel supported in her correct choices thus far. These scaffolding moves are known as 'reducing degrees of freedom', 'maintaining focus', and 'frustration control' (this could also be labeled as 'building/supporting confidence').

At the end, the tutor provides further support by saying, "Very good," enthusiastically. The tutor seems to feel more confident in how to provide the best form of scaffolding to Aum, fine-tuning his help here. Additionally, Aum reacts by smiling and emphatically saying "Oh!", as if to say, "but of course, Watson, it was right in front of me all along!" demonstrating her own strategy for managing frustration and maintaining positive face. This exchange is also noteworthy for the way it highlights how the social experience of engaging in collaborative dialogue triggers the learner's recognition of a concept. The tutor points out the line where an error is located and Aum reacts by repeating back the line, thinking it through for herself. Without the tutor providing more support than simply being present, the nature of Aum's error suddenly dawns on her. Aljaahfreh & Lantolf (1994), refer to this help, "triggered by the dialogic presence of another more expert, individual" (p.472) as the *collaborative frame*. It should be noted however, that one partner need not be more expert than another. Additionally, this frame

is often thought of as mainly being applicable "prior to any overt move on the part of the tutor" (ibid.) but this restriction is unnecessary if we view the collaborative frame in more fluid or dynamic terms.

Episode A would be rated a 3 as Aum notices her error after several assists. She notices and corrects her error after it is narrowed down to the segment level.

In episode B, the tutor scaffolds by 'reducing degrees of freedom' and 'maintaining focus'. This episode would be rated a 3 as well. While it is encouraging that Aum is able to notice her errors after some assistance in both of these episodes, and that mutual understanding and comfort is improving as well as scaffolding help, it cannot be said yet that microgenetic or macrogenetic improvement has been made yet as the help offered is still narrowed to the item level.

Episode C2

Here the problematic item is "had dinner done" and through collaborative dialogue, Aum is eventually able to produce "finished dinner.", though the tutor's help is not so precise or finely-tuned here.

- 16 M: Okay, this is good, "He felt hungry" you might want to say "so he was cooking, so he was cooking dinner [inaudible] How about in this part here though, is there anything you would change? ["when he had dinner done" underscored]..
- 17 A: "When he finished a dinner done"
- 18 M: Hmm, interesting, okay, um....how would you, you want to say that.. it's about dinner so how would you.. change any of that? .. I don't know if I would say, "dinner done."
- 19 A: We can (say) eat, we can "eat finish"
- 20 M: hmm, okay, can you use *finish* as a verb [following another verb]?

- 21 A: "finish."
- 22 M: Can finish be a verb? [following another verb]
- 23 A: ."eat finish"..(chuckles) I don't know
- 24 M: How about if this [points to "finish"] was the verb (following) here [points to the position after "he."]. If you didn't have this ["have] as the verb.
- 25 A: //Ohh//.
- 26 M: Then you use this as the verb.. before "dinner."... What would you say?
- 27 A: "He finished dinner."

Commentary

While the last two episodes were noteworthy for the growing understanding and improvement in scaffolding help, this episode is noteworthy for the lack of these two features. The tutor points out that "he felt hungry" is well-formed and "when he had dinner done" is not but then his advice becomes imprecise, which possibly confuses Aum; possibly the tutor became confused by Aum's very unusual construction. Had the help been more focused and clearer it is possible Aum would have noticed her error earlier. While episodes A and B demonstrated improved understanding and fine-tuning of help, episode C demonstrates some backward movement, which could affect how Aum is able to perform in later episodes and sessions. This episode is rated a 3 as Aum is able to find and correct her error after some assistance.

Session 3

This was the last negotiation session between learner 2, Aum, and the tutor. It involved the story about the woman who bought a parrot for her mother's birthday. In these last sample episodes, we see an example where Aum is making progress towards

self-regulation but we also see an example where Aum is still being provided a lot of help, that is relatively explicit, to find her error.

Episode C3

In this episode, the target structure is the auxiliary 'do' which is still in the present tense. This episode is important in that Aum is able to pick out her error in a whole line of language.

- 15 M: So, "After that, she called to her mother, she called her mother, and she said, do you like a gift from her?" Okay, would you change anything in this part?
- 16 P: "Did you like a gift from her?"

Commentary

This episode is noteworthy in that Aum shows signs towards microgenetic and macrogenetic growth. From a whole line of language, Aum is able to notice that the auxiliary 'do' should be in the past tense. Later in this session, the tutor also discusses Aum's use of pronouns, which could be said to be moving off the focus. Again, this brings up the tension between *maintaining focus* as a scaffolding move and attending to other vital language needs. In this case, the tutor judged that it would be important for communicative purposes to get the pronouns right, but some readers and researchers might argue that focus was sacrificed, which could have some effect later on Aum's progress in self regulation of the target structure. Nevertheless, since the focus is on verb structures, this episode would be rated a 4, as Aum shows signs of progress in self-regulation.

Episode D3

This is the final episode of negotiation between the tutor and learner 2, Aum. The target structure is the infinitive, 'to cook'. This episode illustrates the use of fairly explicit assistance – the use of analogies – to help Aum produce the target structure. It illustrates an example of where the tutor might have offered too much help, which could affect later progress towards self-regulation.

- 17 M: Um, maybe you wouldn't want to use the past tense here What could [points to 'cooked'] you use but not the past....She brought a parrot for a reason, right. For a reason. So what verb, what kind of verb do you use? What tense?... "She brought a parrot...?"
- 18 A: "brought a parrot, was cooking."
- 19 M: Okay, um, what if we don't use the past at all? We don't use "cooked," we don't use "cooking." But this shows a *reason* why she brought the parrot. Something, something about the reason why she brought the parrot.....Um, okay, so for example, so for example, okay I have no hair [laughs] okay?
- 20 A: yes[chuckles softly]
- 21 M: So, I go to the store, I buy a wig. I go to the store, I buy a wig um, so I went to the store...what would I use [before] for "buy" there? "I went to the store...um, okay, a word before, "buy."
- 22 A: "bought."
- 23 M: Before "buy." "buy" is okay but I need a word before there
- 24 A: ..a word before buy?
- 25 M: word, I need a word
- 26 A: "I buy"
- 27 M: Yeah, um, remember you use sometime before, the phrase "in order to," right?

 Remember, "in order to." So, "I went to the store...in order to..to buy the wig," right? What if I don't say, "in order" what can I say? "I went to the store..."
- 28 A: "for a parrot....in order to....."

- 29 M: Okay, good, so if I don't say, "in order to" ..I can take out "in order"..So, "I went to the sto:re..I went to the store to buy a wig, okay. I went to the store to buy a wig. Right "To buy" shows a reason, right? "I went to the store to buy a wig." "I went to the field to play.. Frisbee." Okay "I went to the field to play Frisbee." "I went to Payap to study." Okay, so here, what could you use for "her mother brought a parro:t?"
- 30 A: "to cook."
- 31 M: Good, "to cook for the meal." Okay, "to cook for the meal."

Commentary

This episode is noteworthy for a number of reasons. Aum is able to notice and correct her error after a long exchange and much negotiation, with fairly explicit intervention, so this episode would be rated a 2.5. Aum is finally able to produce the right answer after the tutor provides enough analogous examples. It is unclear why Aum is unable to produce the correct response as she had been able to produce the same item in session one without much intervention. It is possible the tutor over-intervened, providing too much language, which might have confused her. Here, Aum and the tutor can be said to have staggered back in mutuality and equality, which could have implications for her final, delayed, oral performance.

In summary, the following reasons are plausible for the reasons Aum made some progress towards self-regulation of correcting ill-formed verb structures. She became more comfortable with the methods and presence of the tutor as the sessions progressed, she found ways to support her sense of positive face, the tutor's help was occasionally well-scaffolded – they were able to meet in her ZPD, the target structures were not unfamiliar to her, and she demonstrated some microgenetic and macrogenetic growth on occasion. However, her progress was more modest than Pen's. Judging from the record

and the tables, it looks like the help offered to Aum, was a little less graduated, at least towards the end of the sessions. In Pen's last session, she was able to make most of her changes with fairly implicit help – whole line level, problem not explicitly pointed out - whereas the help offered to Aum was a bit more explicit in the last session; analogies were used and help was narrowed to the item level.

This concludes the commentaries section. The following tables summarize the qualitative results. Column 1 includes the target item and what part of speech it is.

Column 2 contains the line, word, or action that triggered the learner's awareness and led to a correction. The level and/or quality of help is added where relevant – at the whole line level, the phrasal segment level, or the item level. Column 3 gives a rating of the learner's movements towards internalizing/self-regulation. The researcher added .5 to some of these ratings as he felt that a few episodes fell between levels in terms of how much help was offered.

Table 13. Summary of Negotiation Sessions, Qualitative Results for Pen

Sessions	Item/target structure	Trigger/quality/level of help	Rating
	'finished working': past copula	Tutor provides correct form at item level	1
	'was': copula	"Would you change anything?" Whole line level	3.5
	'was': copula	"How about this? Is there anything?" Item level	3
	'felt': past irregular	"And how about anything in this part?" Line level	3
	'were': copula	"This part here?" Whole line level	3,5
2	'was': copula	"But there something wrong with the tense here." T points to item	3
	'had cleaned': past perfect	"Would you change anything in there?" Whole line level	4
	'found': past irregular	Learner reads line. T: "and?"	3.5
	'finished eating': gerund	"you want to take that [points to 'to'] out". Item level	2.5
	'fell': past irregular	"That is similar to this here"? – analogy, item level	3.5
	'was': copular	"And then there is this part here," learner anticipates, whole line level.	4
	'brought': past irregular	"and this?" Item level	3
	'felt': past irregular	"past tense of feel?" Item level	3
3	'sat': past irregular	Notices problem but T provides form	2
	'did': past auxiliary	"Is there anything here you would change?" Whole line level	4
	"returned": past irregular	"Anything else?" Whole line level	3.5
	"laughed": past irregular	T reads line	4

Table 14. Summary of Negotiation Sessions, Qualitative Results for Aum

Sessions	Item/target Structure	Trigger/quality/level of help	Rating
1	'brought': past irregular	T provides correct form	1
	'brought': past	"You want to change	3.5
	irregular	this again, right"?	4
•		Item Level	
	'got': past irregular	"There's something	3
		wrong with the tense	7
	(4). : C:4:	here." Item level	3
	'to go': infinitive	"Is the tense right?" Item level	,
	'brought': past	"The past tense of this	3,5
	irregular	item?" Item level	
	'swung': past	Tutor reads line	4
	irregular	"D	2.5
	'hit': past, from 'will hit': future	"Do you want to	3.5
	nit: iuture	change anything?" Whole line level	
2	'was': copula	"There's something	3
2	was . copula	here in this segment"	,
		long phrasal level	
	'to cook': infinitive	"If you left that in, is	3
		there anything else	
		you would change?"	
		Item level	
	'finished': past	"Then if you use this	3
	regular	(finish) before	
		'dinner', what would	
		you say?" Item level	
	'were':copula	T rejects unsuccessful	3
		L attempts, "No, that	
		is okay."Whole line	
2	5a	level	2
3	'wore': past irregular	T provides analogy. Item level	3
	'wanted': past regular	"What would the past	3.5
		tense of that be?" Item	
		level	
	'did': past auxiliary	"Would you change	4
		anything in this	
		part"? Whole line	
	,	level	
	'to cook': infinitive	Provides analogies:	2.5
		Item level	

This last section of the study lists the answers the learners gave to the post study questions and discusses their relevance to the outcomes.

Post-study interview questions and answers

1. How did you feel about the study and/or what kind of feelings did you have while doing it?

Pen answered that it was "good" but she was sometimes nervous. Aum said it was "funny" but also mentioned she was sometimes nervous. She also made a gesture of her heart beating fast.

2. What did you feel that you learned from participating? Did you think you progressed?

Pen said she thought she learned about grammar and that she improved her grammar in this process. Aum also said she learned about grammar and telling the stories.

3. Would you like to do it again?

Pen said "no" when asked this question but Aum answered "yes" and said "funny."

4. Did you study English in some way on the break? What kind?

Pen said she took a conversation class at AUA over the month break but Aum said she did not study English.

The answers to post study-interview question 4 above could also be linked to the differing performances of the learners on the final, delayed story-telling task. Perhaps the combination of Pen's greater progress in self-regulatory scores over the first 3 sessions and the fact she took another course in English led to the marked improvement in her final, delayed performance. Aum still made progress on her delayed performance,

however, albeit by only 2 percentage points. This small progress is encouraging, however, in that even though she said she did not study over this break she was able to not only maintain her level of self-regulation, but even surpass it, albeit by a small degree.

Affective factors such as nervousness are also likely to affect performance though both participants felt some stress. The tutor/researcher however, did not notice overt differences in stress levels between the learners, so it is not easy to determine to what degree nervousness played a role in their own development or how it affected the different outcomes. Without overt signs, and without being able to know to what degree the learners experienced nervousness, it is not clear what role this affective factor played. Despite occasional nervousness, however, both learners made some progress in self-regulation.

Overall, it appeared that Aum enjoyed the study more than Pen. Although in answering "no" to question 3, the tutor/researcher thought Pen interpreted this question to mean, "Would you like to have more sessions, beginning soon?" Since both learners are busy with other course work, the tutor/researcher believed that she was just indicating she needed to concentrate on her required courses. Nevertheless, it is interesting that Aum seemed to enjoy the sessions more than Pen as Pen demonstrated greater progress than Aum. Aum's demeanor also seemed a bit lighter than Pen's. Pen smiled on occasion but did not laugh. Aum smiled and laughed on occasion. It could be that Pen's progress can be indexed to taking a more serious approach to the study.

The next chapter draws conclusions from these results, discusses how this study can be relevant to the classroom, and concludes with a discussion of the limitations of the study with suggestions for further research.

