

Problem Solving in Cross-Cultural Communication Situations

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Introduction

The purpose of this study is to examine how a group of Japanese students understood and solved cross-cultural communication problems that they experienced in the United States. This purpose assumes that, because language and culture are inseparably intertwined, the experiences learners have in a target culture play an important role in their target language learning. Second language (L2) learners need to have not only appropriate language knowledge but also appropriate pragmatic knowledge. To gain such knowledge, L2 learners need to understand what native speakers do in situations that are problematic for L2 speakers in the target community. Being involved in problematic situations causes language learners to analyze situations, consult with others, share information, and lower anxieties so as to have greater confidence in similar situations. Perceptions and emotions are also important in language learning. Although they are not directly linguistic, these aspects involve controlling emotions and analyzing cross-cultural communication problems. For these reasons, it is reasonable to suppose that problem-solving helps develop pragmatic knowledge and language proficiency.

Nevertheless, little is known about language learning strategies (LLSs) as problem-solving strategies that L2 learners use in a target community. Many researchers, such as Chamot and Küpper (1989) and Oxford (1990), have investigated LLSs of non-native speakers. Wenden (1986), for example, investigated adult ESL students' experiences in everyday social settings. However, she focused on their knowledge about their language learning, rather than on processes students actually had gone through to solve their problems in a host country. Therefore, as Oxford and Crookall (1989) contend that LLSs are useful in both formal, academic settings and informal, nonacademic environments (p. 404), it is important to investigate cross-cultural communication problems L2 learners experience in a target community and the nature of problem-solving processes, which may contribute to their language learning.

To understand how L2 speakers' pragmatic knowledge is constructed in a target culture, we may draw on constructivist perspectives on learning. Because cultural experience seemingly plays an important role in language learning in authentic situations, we should examine how L2 speakers learn a language in the target culture. Reid and Stone (1991) point out Vygotsky believed that interactions with others and with the social institutions, practices, and artifacts of the culture play a *formative* role in development (p. 10). That is, constructivists believe that knowledge is co-constructed through social interactions with a culture and its people. If cultural experience influences human cognitive construction, L2 students who grew up in different environments from the target culture may have difficulties in making sense of many experiences which happen in the target community. For example, L2 learners may understand phenomena in a different manner from people of the host country. That is, as constructivists see learning as a process to acquire knowledge and a learner as an *active organism* (Driscoll, 1994), L2 learners need to construct knowledge aggressively when they try to understand their experiences in authentic situations. Moreover, if cognitive development occurs through social interactions, as constructivists claim, it will be important for L2 learners to communicate with people in a target culture or those who are more experienced.

Taking these constructivist views into account, we may view stories as critical data in language learning research. According to Oxford and Crookall (1989), researchers have investigated LLSs using primarily six methods: making lists based on observation, interviewing and obtaining think-aloud data, analyzing students' notes, analyzing their diaries, administering survey studies, and investigating the teachability of one or more strategies. However, little is known about stories as a valuable data source to examine L2 students' LLS use. Schank (1990) claims that stories are very basic to the human thinking process (p. 219) and emphasizes that thinking depends on storytelling and story understanding. That is, stories that individuals store in their minds influence their thinking, and every story is based on what people have already experienced. He points out that even planning has its basis in previous stories. For these reasons, we can expect the naturally occurring stories that L2 students tell to shed light on their problem-solving strategy use.

In the present study, a group of female Japanese students presented their stories of cross-cultural communication problems experienced in the United States and how they solved them. Content of the data from interviews and questionnaires was then sorted into emerging categories. This paper will examine examples of stories one participant presented and an overall analysis of stories all participants experienced in one situational setting.

Preliminary Study

I conducted a preliminary study to select problematic cross-cultural communication situations in the United States that would be investigated in the study described below. Participants in the preliminary study were 30 Japanese students (7 males and 23 females) studying at an American university. To collect data, I listed the following 10 possible problematic situations that participants might have encountered in the United States in their daily lives, and they were to mark all situations that they had experienced:

1. Returning an item at an American store
2. Going to see a doctor
3. Opening a bank account
4. Dealing with an immigration officer
5. Taking a driver's license test
6. Building a friendship with an American
7. Participating in class
8. Questioning a bill
9. Asking a neighbor to keep quiet
10. Talking to a professor about a grade

The participants could also describe situations other than these ten. I then sorted the situations into units, and the following five situational settings emerged:

- A) Service/Commercial setting
- B) Academic/Learning setting
- C) Interpersonal/Social setting
- D) Bureaucracy/Official business setting
- E) Health setting

Based on the results, I chose the three most common situational settings to investigate in the major study: Service/Commercial setting (e.g., obtaining a service, or complaining about a service), Interpersonal/Social setting (e.g., building communication, or proposing a request), and Academic/Learning setting (e.g., dealing with course work, or communicating with a professor).

Major Study

The purpose of the major study was to examine retrospective accounts of how Japanese students as non-native speakers of English prepared for, performed in, and reflected back upon authentic situations involving communications in the United States, which they perceived as problematic. In this study, eleven female Japanese students studying at an American university participated. There were five criteria for selecting participants. First, I, a member of their culture, selected only Japanese students for better understanding because cultural factors might influence outcomes.

Second, all participants, of whom 10 were graduate students and one a fourth year undergraduate, were in degree programs. Third, participants had to be those who had been living in the United States for more than one year. I assumed it would take at least one year for Japanese students to become used to American life and to have experienced a wide variety of situations in the target country. Fourth, I selected participants who had more than one experience in each selected setting so that I could examine developmental processes. It should be noted that in this study the first time and the second time did not mean the very first or second time, but rather indicated the chronological order of the experiences. Fifth, I selected only females because gender as well as culture might influence perceptions and experiences.

In this study, I asked the following three research questions: (1) What thought processes did female Japanese university students go through before, during, and after they experienced problematic cross-cultural communications in the three settings?, (2) What factors influenced female Japanese university students' thought processes when confronting authentic situations?, and (3) What generalizations or new learning did female Japanese university students report drawing from these experiences?

Based on the results from the preliminary study, I constructed a questionnaire concerning participants' experiences of problematic cross-cultural communications in the United States. The participants completed the questionnaire by answering the following nine questions presented for each incident.

1. When did the problem happen?
2. Where did the problem happen?
3. With whom were you then?
4. Describe what happened?

5. What did you do to prepare before trying to solve the problem?
6. What did you do during your attempt to solve the problem?
7. How did the problem-solving turn out?
8. What did you do after you dealt with the problem?
9. What did you do in Japan when you had the same problem?

Participants were to present two incidents for each setting to investigate evidence of any learning from repeated experiences in the same setting. That is, each participant presented a total of six incidents for the three settings. Some participants presented three incidents in some settings, but I analyzed only two. Based on the data from the questionnaire, I interviewed each participant about each incident at least twice. Interviews, which were conducted in Japanese, were audiotaped. Finally, I translated data from the questionnaires and the interviews. I then conducted a member check for the accuracy of the translation.

To analyze the data, I sorted contents of the questionnaires and the interviews into units and came up with three main themes: problem-solving strategies, emotions, and perceptions. Problem-solving strategies are participants' actions, emotional responses are statements indicating participants' positive/negative feelings, and perceptions are participants' understandings of themselves, others, or the target culture. I then repeatedly read the contents of each theme to define the units of data and categorized contents. As a result, eleven items for strategies, six for emotions, and three for perceptions emerged as follows.

STRATEGIES:	S1	Making action plans
	S2	Using linguistic resources
	S3	Gathering written information/documents
	S4	Rehearsing how to handle situations
	S5	Calling on prior knowledge
	S6	Determining stance/attitude
	S7	Comparing situations
	S8	Using paralinguage
	S9	Observing other people
	S10	Discussing with other people
	S11	Communicating with the opposite party

EMOTIONS:	E1	Shock
	E2	Anger/Offense-taking
	E3	Anxiety/Depression
	E4	Positive anticipation
	E5	Happiness
	E6	Empathy

PERCEPTIONS:	P1	Analyzing self
	P2	Perceiving others' behaviors/attitudes
	P3	Perceiving cultural expectations

I sorted all data from questionnaires and interviews into the above categories. I then conducted a peer examination by asking another graduate student to comment on my categorization. The major study consists of two parts: an overall analysis to find patterns among the eleven participants and a case study to examine one participant's case in detail.

Overall Analysis

In this paper, I will introduce one segment of the overall analysis from the major study to show the nature of the data and data analysis. First, I will present an example of incidents that one participant, Kaori, experienced in the United States, and examine the thought processes she underwent when she encountered cross-cultural problems. Second, I will discuss problem-solving strategies that the eleven participants employed in the same Service/Commercial setting. Although emotions and perceptions strongly influenced participants' thought processes, I will mainly discuss their problem-solving strategies.

1) Critical incidents

Following are two incidents in the Service/Commercial setting that Kaori experienced. These stories were reconstructed based on the data from the interviews and the questionnaire.

Changing Residences (First incident)

Thinking of how to accurately state her message in logical way, Kaori sent a fax from Japan to the housing office of the American university where she was going, to inquire about the availability of a room.

After arriving in the U.S., she found the on-campus housing too noisy for her to study. She wanted to move out but worried about whether she could break her contract. Meanwhile, she happened to talk to a friend of her roommates and asked her if it was possible to break a contract. After talking to the American student and her resident assistant (RA), she felt confident and finally decided to go to the housing office. Because she did not even know where the office was, she consulted a campus map. She then thought of what to say and how to explain her situation on the way to the office.

Kaori explained her concern to the director of the housing office and managed to break her contract. The director was understanding and provided her with some off-campus housing information. She then compared information on different rentals. In the meantime, she decided to visit her department because she had no idea about what to do as a new student. At first the secretary seemed businesslike, but became friendly when Kaori mentioned that they had talked when she called the department from Japan. The secretary then asked her if she had any idea where to live. Kaori felt uncomfortable when the secretary immediately started calling her acquaintances to see if any of them had a room available, but she decided to take a look at one room in the house of an acquaintance named Nancy. Before going to the house, she skimmed through a book for the Japanese to examine matters that would require attention when selecting an apartment in the U.S.

Kaori planned to ask Nancy about such things as driving in winter and her family's routine life. Seeing the house, she understood the differences between an apartment and a room for the first time. Because she had thought all places on the list given from the housing office were apartments, she had not understood such descriptions as, for example, sharing kitchen utensils.

After considering the living conditions, Kaori decided she did not want to live there and thought of what would be the best way to turn it down smoothly. She then called Nancy and honestly explained her reasons, such as the distance of the house from the campus and the presence of Nancy's small child who might distract her from studying. Kaori had not expected that she would have any problems because she assumed that Americans were straightforward. However, Nancy only said ok and immediately hung up, so Kaori wondered if she was angry. Kaori tried not to

worry about Nancy because she herself was the one to make a decision. Later, the secretary told her that Nancy was upset and that the secretary had lost face.

Kaori felt upset and frustrated about her communication with the secretary because she realized that she had to rely on others in a new place where she had no social network. After a while, Kaori talked to a Japanese friend and an Indian friend about the incident. She found from the Japanese friend that other students were also complaining about the secretary. Looking back on the incident later, Kaori thought she should have recognized that the secretary poked her nose into everybody's business, and told the secretary not to bother. Analyzing the incident, she also thought her compliments on the house may have made Nancy think that Kaori was interested in renting the room. Therefore, she decided to clearly state her opinions when facing similar situations in the future and move on to the next stage because she thought there was no use regretting what had happened.

Changing Residences (Second incident)

A year later after the first incident, Kaori again looked for a place to live. She had already lived near the new town but felt anxious about finding an apartment in it. She tried to do a thorough job of obtaining information from friends, newspapers, and flyers. She called a couple of places, but they had already been taken. She called the landlord in question, who identified himself as a professor. She thought she should be careful because she believed that Americans might only give her the positive details about a place. She also prepared some questions to ask such as what kind of people were living there. Although she felt a little nervous before meeting the landlord, she reassured herself because he was a professor. Kaori went to see the apartment immediately because the landlord had said that somebody would soon take it. Contrary to her expectations of a professor, he was wearing a ragged T-shirt and jeans. While taking a look at the apartment, Kaori tried to obtain as much information as possible, particularly concerning a shared kitchen, which she had difficulty understanding. Under his pressure, she felt she had to make an immediate decision, and said she would take the apartment. She felt uncomfortable, but rationalized to herself that it met some of her conditions and no place was perfect. After moving in, however, she found that she would be sharing the bathroom with men instead of women as she had been let to expect. She wondered if she had misunderstood the landlord or been misinformed, but now she had to live in the apartment for a year.

After the academic year, she subleased the apartment for the summer and moved to another state. Kaori now worried that she might not be able to get her deposit back if her sublessee damaged the room. Although asking about money was not a Japanese custom, Kaori finally made up her mind to email the landlord to ask

for her deposit straightforwardly. After a couple of email messages, the landlord replied that he would send the deposit back soon. Although he was also supposed to give her \$50 for goods he had sold for her, Kaori overlooked it because it was more important to get the deposit back. When she heard nothing further, she decided to call him. Not wanting to ask about money too frankly, she started with a friendly, How are you? before asking for her deposit. Again, the landlord told her that he would return the deposit soon. She waited a few months without hearing from him and started looking for ways to deal with the problem. She then happened to find information about the student legal services in a pamphlet distributed to international students, and consulted with the legal services although still wondering if she should wait longer.

Before going to the student legal services, Kaori organized the necessary information in her head so as to describe her problem clearly. She filled out a form and made an appointment to come back and see an attorney. Meanwhile, she skimmed through a brochure which she had obtained at the legal services and found state regulations concerning problems that students might encounter with their landlords. She again read the book on living in the U.S. which she had referred to the last time. Finally, Kaori consulted with a student attorney, who wrote to her former landlord to inform him that she would take appropriate action if she heard nothing from him. After a long while, she received a partial payment from him. She called the legal services again after organizing an outline to explain her situation in case she got a different attorney. As she was advised, she waited to cash the first check until, at last, the landlord sent her the rest of the payment. Her doubts that the problem had solved were confirmed when she tried to cash the checks, which were bad. She was angry at being cheated, but at the same time felt that it happened as expected. Additionally, she wondered if international students living in the same apartment building had also been cheated. After that, Kaori complained about the landlord to whomever she met. Planning what to say, Kaori again consulted with the legal services. After the student attorney suggested that she contact the landlord, she decided to email him in a strong tone. She became very irritated when she did not hear anything especially since her attorney was graduating soon. Fortunately, however, Kaori received her deposit back before her case was turned over to a new attorney. Even after the incident was over, Kaori still complained about the landlord to whomever she met. She felt a little relieved after talking to them, yet still harbored ill feelings toward the landlord.

Thought processes

In the overall analysis, I sorted data for each incident into Strategies, Emotions, and Perceptions, and further analyzed them by using the categorization mentioned above. The following charts show Kaori's thought processes according to this method:

		EMOTIONS		STRATEGIES		PERCEPTIONS
Bef	E3 E4	-Worrying if she could break her housing contract with on-campus housing -Feeling confident after consulting with the friend of her roommates	S1 S2 S9 S9 S1 S3 S2	-Deciding to send a fax to the housing office from Japan -Preparing how to accurately state her message in logical order when writing a fax message -Consulting with her RA about the room -Consulting with a roommates' friend about the housing contract -Deciding to go to the housing office -Consulting a map to find where the housing office was -Preparing what to say and how to talk		
Dur	E3 E4 E3 E2	-Worrying about the family's routine life -Feeling comfortable about turning down the offer -Feeling worried -Feeling uncomfortable when the secretary told	S10 S6 S1 S3 S9 S1	-Explaining to the director of the housing office -Comparing information on off-campus housing -Deciding to visit her department to obtain necessary information for new students because she had no idea what to do -Skimming through a pamphlet which seemed to have information for new students -Consulting with the secretary -Deciding to take a look at the house -Skimming through a reference	P2 P2	-Perceiving that the director was an understanding person -Perceiving that the secretary's attitude changed from businesslike to friendly -Perceiving that the secretary was meddlesome

		her that the secretary had lost face	S3 S2 S10 S6 S1 S2 S1 S5 S10 S1	book on living in the U.S. -Preparing questions to ask Nancy -Asking Nancy questions about family routine -Comparing information between apartments and rooms to rent -Deciding to turn down the offer -Preparing what to say to Nancy in order to turn down the offer most smoothly -Determining to explain the reason concisely -Recalling her experience -Explaining to Nancy over the phone that she wanted to turn down the offer -Adopting a casual attitude	P3 P2	-Perceiving that Americans are straightforward -Interpreting that she made Nancy angry because Nancy had hung up immediately
Aft	E3 E2	-Feeling doubtful about communication with the secretary -Feeling upset & frustrated as she needed to rely on others in a new place where she had no social network	S9 S1	-Complaining to a Japanese friend and an Indian friend about the secretary -Hearing from the Japanese friend about the secretary -Deciding to tell her opinions clearly when facing similar situations in the future	P2 P1	-Perceiving again that the secretary was meddlesome -Realizing that she should have clearly told the secretary and Nancy her opinions

Changing Residences (Second incident)

		EMOTIONS		STRATEGIES		PERCEPTIONS
Bef	E3	-Feeling a little anxious about finding a place in the unfamiliar town	S5	-Recalling which newspapers had housing information	P3	-Perceiving that Americans might only give her the positive details about a place
	E5	-Feeling nervous before meeting the landlord because he was a professor	S3	-Consulting with Japanese friends to obtain information		
		-Feeling relieved before meeting the landlord because he was a professor	S6	-Seeking housing information in newspapers and flyers		
			S5	-Comparing the housing information		
			S1	-Recalling her previous experience		
			S2	-Determining her attitude before calling so as not to be taken in		
				-Preparing what to ask the landlord		
dur	E3	-Feeling surprised because the landlord looked different from her expectations	S10	-Asking the landlord questions to obtain as much information as possible	P2	-Perceiving that the landlord was businesslike yet looked different from her expectation
		-Feeling dissatisfied with some living conditions	S1	-Deciding to rent the apartment	P2	
	E2	-Feeling confused	S1	-Adopting a positive perspective	P1	-Perceiving that the landlord was making her decide immediately
			S1	-Deciding to email the landlord		
	E3	-Regretting her decision	S10	-Planning to email the landlord to ask him about her deposit straightforwardly	P2	
				-Asking the landlord about the deposit via email a couple of times		
	E3	-Worrying after she moved to another state about her sublessee damaging the room	S1	-Deciding to overlook the \$50 which she was also supposed to get from the landlord		-Believing that she may have been misinformed or she did not ask him correctly
			S1	-Deciding to call the landlord		
			S2	-Planning to start with A How are you?		
	E3	-Feeling anxious when thinking about whether she should write a straightforward email message	S10	-Asking the landlord about her deposit over the phone		
			S1	-Deciding to leave the matter unsettled because she relied on his word, and waiting a few months		-Perceiving that the landlord cheated her
			S1	-Looking for ways to deal with the problem		
				-Deciding to consult with the legal services		
				-Preparing information in her head so as to describe the problem in		

		landlord about the deposit straightforwardly		order -Consulting with the receptionist about how to see an attorney -Skimming through a brochure mentioning state regulations		
dur		-Feeling irritated when thinking about whether she should wait for the landlord to send her the deposit back	E3	S3 S1 S2 S9	-Reading a book on living in the U.S. which she had brought from Japan-Consulting with a student attorney -Preparing the outline to explain her situation before consulting with the legal services again -Consulting with the legal services again about the partial payment -Deciding to wait to cash the first payment as the legal services suggested	
		-Feeling anxious when thinking about whether she should consult with the student legal services for such a problem	E2	S3 S9 S2 S9	-Creating a mental scenario because she might talk to a different attorney -Preparing the explanation of her case again -Consulting with the legal services again	
		-Feeling anxious and doubtful about the checks	E3	S1	-Complaining about the landlord to whomever she met -Preparing the outline of her case again before consulting with the legal services-Consulting with the legal services again	
		-Feeling very angry when she found that the checks were bad	E3	S4 S2 S9	-Deciding to email the landlord in a strong tone -Asking the landlord via email to send her deposit back	
		-Feeling a little relieved after complaining to her friends	E2 E5	S9 S9		
		-Feeling very irritated until she finally received her deposit back	E3	S2 S9 S1		

			S10		
Aft	E2	-Harboring ill feelings toward the landlord	S9	-Complaining about the landlord to whomever she met, mainly Japanese friends	

Analysis of thought processes

From these charts, I interpreted Kaori’s thought processes before, during, and after each incident as follows:

Kaori’s First Incident

This incident involved three main causes. First, Kaori had trouble with her housing contract. Second, she had communication difficulties with the secretary of her department. Third, she had a problem with Nancy, who was an acquaintance of the secretary. In the process of solving her problem, Kaori mainly employed five problem-solving strategies. First, determining her attitudes toward the opposite parties or circumstances (S1) was a critical approach. Kaori at first decided to send a fax to the housing office from Japan to inquire about the availability of an on-campus apartment. However, she made up her mind to ask the office whether she could break her contract and move out because she found that it was not a quiet atmosphere. Also, she decided to visit her department secretary to obtain necessary information for new students. Because the secretary asked some friends about the availability of a room for her, she decided to take a look at one. However, she decided to turn down the offer (S1) because some of the conditions did not meet hers. Second, Kaori consulted with other people (S9) throughout the incident. Before visiting the housing office, she asked her RA and a friend of her roommates if it would be possible to break her housing contract. Although she did not visit the secretary for housing advice, she sought help from her department secretary because she had no idea what to do as a new student. Because she felt doubtful about her communications with the secretary, Kaori consulted with friends. Third, Kaori prepared linguistic resources (S2) before attempting to solve the problem. For example, she prepared what to say before sending a fax to the housing office, going to the housing office, and turning down the housing offer from Nancy. Fourth, Kaori attempted to obtain information (S3) in the process of solving the problem. For instance, she skimmed a reference book on living in the United States for Japanese before going to Nancy’s house. Fifth, she actively assessed the incident (P1, P2, and P3). This approach seemed to be significant in her efforts to resolve the problem. In particular, she analyzed causes of the problem even after the

incident was over. From her analysis, Kaori reassessed herself and realized that she should have clearly told the secretary not to bother.

Kaori's Second Incident

Kaori had four problems related to her former landlord. First, having no social network prolonged solving her problem. She moved to another state and had to deal on her own with the trouble regarding her deposit in the new place. Because she had not established social networks there yet, she lacked people who could provide her with useful information and emotional support. Second, the landlord's attitude influenced Kaori's attitude and decision making. For example, because of his threatening attitude, she felt that she had to decide to take the room immediately. Personal and cultural differences between the two influenced her thoughts and emotions. Third, second language use seemed to be a problem. For example, she found it difficult to convey her feelings appropriately in English. Fourth, a difference in practice between Japan and the United States caused problems. Because procedures for moving out differed between the two countries, Kaori was troubled as to what to do.

To solve her problem, Kaori used five approaches. First, she repeatedly determined her attitude and actions (S1). For example, before calling places to rent she determined her attitude so as not to be taken in. She then determined a positive perspective on her living situation although she was dissatisfied with it. After she moved to another state, Kaori again made her decisions. She first decided to email the landlord and planned to ask him about the deposit in a straightforward manner. She then decided to call the landlord. Although she left the matter unsettled and waited for a few months, she finally made up her mind to consult with the student legal services. Kaori again decided to email the landlord when she found that his checks were bad. Second, Kaori extensively consulted with other people (S9) to obtain information and lower her anxieties while trying to solve the problem. She consulted with Japanese friends before looking for an apartment. In the new place, she then repeatedly asked for help from the student legal services. Moreover, to feel more relieved, she complained to whomever she ran into when she found that the checks were bad. Third, Kaori prepared linguistically (S2) to perform better. She prepared what to ask or what to say before calling the landlord to ask about his apartment, before calling him to ask about her deposit, and before calling the legal services to consult about her case. Fourth, Kaori attempted to gather information from existing materials (S3). To look for an apartment, for example, she sought housing information in newspapers and flyers. Also, before meeting an attorney, she skimmed through a brochure mentioning state regulations and the reference book for the Japanese on living in the United States, which she had used in the first incident. Fifth, Kaori attempted to communicate with the opposite party to solve the

problem. Although her communications involved many emotions, she emailed and called her former landlord to solve her problem.

Kaori's First and Second Incidents

In both incidents, Kaori's lack of social networks and use of a second language were the main problems. Her incidents revealed four common approaches. First, Kaori repeatedly made decisions on her own when she did not have anyone with whom she could consult. Second, she discussed her problems with other people when it was possible. Although her social networks were limited, she tried to make use of them to obtain help. Third, Kaori actively prepared linguistically (e.g., preparing what to say) before taking action to make up for her language deficiency. Fourth, she gathered information to find as many solutions as possible.

Overall analysis

This analysis of Kaori's incidents exemplifies the analysis of all eleven participants' data into three themes and categorization of elements within each theme. Below are tables of the frequency of problem-solving strategies in the first and the second incidents for all participants in the Service/Commercial setting.

First Incidents

	Strategies	# of participants [1]	# of uses [2] BEFORE	# of uses [2] DURING	# of uses [2] AFTER	Total # of uses [2]
S1	Making action plans	11	14	13	3	30
S2	Using linguistic resources	11	15	14	2	31
S3	Gathering written information/documents	6	8	3	0	11
S4	Rehearsing how to handle situations	3	3	0	0	3
S5	Calling on prior knowledge	7	8	3	0	11
S6	Determining her stance/attitude	11	5	18	2	25
S7	Comparing situations	6	4	4	1	9
S8	Using paralanguage	3	1	2	0	3
S9	Observing other people	3	0	4	0	4
S10	Discussing with other people	11	11	24	14	49
S11	Communicating with the opposite party	11	0	26	0	26

[1] Number of participants reporting this strategy at least once

[2] Number of uses of the strategy across all participants reporting it.

As seen here, Strategies, S1 (Making action plans), S2 (Using linguistic resources), S6 (Determining her stance/attitude), S10 (Discussing with other people), and S11 (Communicating with the opposite party) were reported at least once by all participants. It was found that there was a strong positive relationship between the number of participants and the total number of uses. However, among those strategies, there was wide variation in the total number of uses. The strategy most used, S10, had twice the number of uses as the strategy least used, S6. Also S10 was reported nearly 40% more than the next highest used strategies, S1 and S2. Although not all participants used them, S3 (Gathering written information/documents), S5 (Calling on prior knowledge), and S7 (Comparing situations) were also important strategies to some participants.

Second Incidents

	Strategies	# of participants [1]	# of uses [2] BEFORE	# of uses [2] DURING	# of uses [2] AFTER	Total # of uses [2]
S1	Making action plans	11	14	11	2	27
S2	Using linguistic resources	10	10	13	2	25
S3	Gathering written information/documents	10	10	7	1	18
S4	Rehearsing how to handle situations	3	2	2	0	4
S5	Calling on prior knowledge	9	7	4	0	11
S6	Determining her stance/attitude	9	3	11	1	15
S7	Comparing situations	5	2	2	2	6
S8	Using paralanguage	4	1	4	0	5
S9	Observing other people	1	0	1	0	1
S10	Discussing with other people	9	11	21	12	44
S11	Communicating with the opposite party	11	0	22	0	22

[1] Number of participants reporting this strategy at least once

[2] Number of uses of the strategy across all participants reporting it.

For the second incidents, strategies S1 (Making action plans) and S11 (Communicating with the opposite party) were used at least once by all participants, and strategies S2 (Using linguistic resources), S3 (Gathering written information/documents), S5 (Calling on prior knowledge), S6 (Determining her stance/attitude), and S10 (Discussing with other people) were used at least once by most participants. There was still a strong relationship between the number of participants and the total number of uses, although it was not as strong as in the first incidents. Also, the pattern of variation of total number of uses is very similar to that of the first incidents. Although not all participants employed it this time, again S10 was the most frequently used strategy.

First and Second Incidents

Both incidents had similar patterns, although overall, participants used fewer strategies in their second incidents. In both incidents, S1 (Making action plans), S2 (Using linguistic resources), S6 (Determining her stance/attitude), S10 (Discussing with other people), and S11 (Communicating with the opposite party) were used at least once by all or most participants. The most significant finding was that S10 played an important role in solving problems. Most students discussed or consulted with others repeatedly, and it is interesting that they employed this strategy even after attempting to solve their problems. Another finding was that students prepared for or dealt with their incidents by making plans and using linguistic resources. Importantly, all participants attempted to communicate with their opposite parties somehow.

Conclusion

The overall analysis in the Service/Commercial setting revealed three significant findings. First, it clearly demonstrated that even advanced L2 students such as Kaori had difficulties managing cross-cultural communications that occurred in the target culture. It showed that students needed not only the target language but also pragmatic or cultural knowledge of the language. Second, students attempted to solve their problems mainly by discussing with others, making plans, or using linguistic preparation. Specifically, they frequently discussed or consulted with other people to obtain advice or lower their anxieties. In the case of Kaori, although she did not have social networks yet at the beginning of her first incident, she consulted with two people before visiting the housing office to gain confidence and also with her department secretary to obtain information about new students. Later,

she discussed her incident with the secretary and with her friends to reduce her anger. As for her second incident, she first consulted with her Japanese friends before looking for an apartment and later extensively consulted with the student legal services about her housing deposit. Third, although I discussed extensively problem-solving strategies, I found that students' emotions and perceptions were significant in their thought processes, and that they were closely interwoven with strategies.

In conclusion, I should emphasize three implications. First, critical thinking appears to play a crucial role in language learning. If, as constructivists claim, people co-construct knowledge with others or environments as they try to understand their experiences, L2 students may need to change their reasoning or put themselves in the place of people from the target culture because L2 students' ways of thinking or prior knowledge may differ from those of the target culture. Therefore, L2 learners may be required to shift their ways of thinking toward those of the target culture to understand phenomena which occur in a host country. Additionally, it is necessary for L2 learners to think critically to understand what is happening in the target culture. Second, we can conclude that it may be advantageous for L2 students to discuss or consult with other people who are more experienced or with whom they can share their experiences or feelings when they have cross-cultural problems. Kaori emphasized the importance of social networks, particularly when problems happened in a new place. As mentioned above, constructivists point out that learning occurs through social interaction. By talking to others, L2 students may find solutions or reduce their tensions. Third, it is important for L2 students to control their emotions. Because strategies appear to be interrelated to emotional aspects, students need to regulate their emotions to reach an appropriate judgment. Talking to others can be a helpful strategy for self-regulation. Likewise, perception, which is also an influential factor in thought processes, should not be ignored. Although it may be difficult to change their perception, L2 students should critically rethink their own perceptions for better understanding of phenomena.

Understanding L2 students' effective thinking processes may be helpful in designing instruction that will facilitate students' learning in authentic situations as well as in classroom settings. By becoming aware of their thought processes, L2 students may also facilitate their own language learning in a target culture. Here are some activities which can lower students' anxieties or encourage students to become aware of their thought processes: First, it would be helpful to install language/culture counselors. Although this study showed that most students had consulted with other people, it may be assumed that new students often do not have

anyone with whom to consult yet, as in Kaori's case. Therefore, counselors who are familiar with both second language acquisition and cross-cultural communication would facilitate students' adjustment to a target culture and students' problem-solving. Of course, L2 teachers also can play the role of counselors. Second, mentor programs can help ease students' acculturation. Like counselors, experienced mentors can provide L2 students with advice. Those mentors can be teachers, native-speaking students, or international students. Third, sharing critical incidents in class is an effective way of facilitating students' understanding of a target culture. By sharing stories, students can understand what strategies other students use and can share feelings.

As Wenden (1986) points out, we should carefully interpret participants' retrospective statements. Although this analysis of students' reconstructions of their experiences is different from her investigation of students' metacognitive knowledge of their language learning, in both studies, stories presented by participants are of great importance to understanding L2 language learning. Findings of the present study may help L2 teachers incorporate authentic learning opportunities in their instruction so as to facilitate students' language learning.

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