

Infinitives, Gerunds, and *That*

~Order of Difficulty in Learning Sentential Complements~

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<Introduction>

In order to teach English effectively it is important for teachers to know which English structures are difficult for the students and which are not. It is also important to know which structures, when they are not used correctly, tend to cause hindrance to communication. Burt (1975) points out that global errors (word order, sentence connectors, etc.) affect overall sentence organization and significantly hinder communication.¹⁾ The subject of this paper, sentential complements, belongs to the category of global grammar, and the acquisition of the proper usage of sentential complements is important for successful communication. Before going to the teaching of the complements, however, a step needs to be taken to identify which complements students have more difficulty with and with which they have less.

In this study I hope to provide just such a first step to teaching English sentential complements that is to identify an order of difficulty of the structures, particularly for Japanese students. I also investigate whether or not there is a common order of difficulty of the English structures for speakers of different first languages.

<Background>

One of the major questions that has been asked in the field of applied linguistics is whether or not there is a certain acquisition order of English structures which is characteristic of second language learners. The research started in the area of first language acquisition. Roger Brown (1973) conducted a longitudinal study of the acquisition of English morphemes by three children and found

a common order. De Villiers and de Villiers (1973) did a cross-sectional study of twenty-four children and supported Brown's finding.

These findings prompted second language acquisition researchers the question whether or not there is also a common acquisition order of certain English structures for L2 (second language) learners of English. Dulay and Burt (1974 and 1977), in their cross-sectional study on children learning English as a second language, examined the acquisition order of morphemes. The result showed the existence of an acquisition order, but the order was somewhat different from the first language order. Bailey, Madden, and Krashen (1974), in their study on adults, confirmed the result found in the Dulay and Burt study. The study conducted by Krasten, Butler, Birnbaum, and Robertson (1978) gathered the data from seventy university students from four different language backgrounds and found a similar acquisition sequence of morphemes to that obtained by other studies.

Thus the study of an acquisition order has been centered around morpheme studies. There was a definite need of research on the structures larger than grammatical morphemes. Anderson was one of the researchers who recognized that need. She looked for an acquisition order of syntactic structure of a more complex nature than morphemes. Anderson (1978) conducted the research in the production of sentential complements and found a common order of difficulty among Spanish speaking university students. But there remained a need for the further study to see whether or not a similar order can be found among learners from the different first language backgrounds.

This study is an attempt to meet such a need; it is an investigation into whether or not a similar order of difficulty in the production of sentential complements exists among Japanese students. I will also examine the validity of three predictors of order of difficulty Anderson proposed:²⁾ language transfer, length, and derivational complexity.

<Case Study>

1. Subject

A written test was administered to 104 Japanese students to test their mastery of the three basic sentential complements, such as infinitive case, *that*-clause, and possessive-*ing* (Poss-*ing*). The students were the freshmen at Baiko Jo Gakuin College who were enrolled in Speech class. They range in age from 17 to 18 years. Their exposure to English was the same: they had studied English for six years at junior-high and high schools.

In Anderson's study the participants were 180 Spanish speaking students at Catholic University in Ponce, Puerto Rico. They were less homogeneous than the Japanese participants in terms of age and educational background. They ranged in age from 17 to 39 years. Their exposure to English varied: some had studied English from Puerto Rican teachers in the public schools; others studied in private schools where the classes were held in English, and there were some who had lived in the United States up to 2 years.

2. Contents of the test & its procedure

The test was made of two parts: multiple choice section and translation section. The same 25 items as Anderson's were used for the multiple choice section. In Anderson's study there were 32 translation questions from Spanish to English. Among them 14 questions had two possible correct answers. The student was allowed to choose the complement that he thought was most appropriate. Anderson used these questions to see the students' preference of complement. However, these questions were not counted for establishing the order of difficulty in Anderson's study. I excluded these questions because the translations from Spanish to English may give two possible answers, but translations from Japanese to English do not necessarily always guarantee two answers. The appendix contains the test administered.

Following Anderson's study, I also examined other structures

in relation to sentential complements; they were sequence of tense rules, the obligatory choice of gerund after a preposition, *to*-deletion (infinitive complement that has gone through *to*-deletion), surface structure subject, etc. Table 1 shows the structures included in the test along with the test items which corresponded to those structures. The test was administered in a regular class time in July, 1990. The students had 45 minutes to complete the test.

Table 1. Structures Included in Test

Structures	Explanation	Example	Test items
1. <i>that</i>	<i>that</i> complement	We think <i>that we have enough time.</i>	25, 30, 31, 36, 37, 42
2. Poss- <i>ing</i>	Possessive- <i>ing</i> complement	I remember <i>your finishing it last week.</i>	8, 20
3. Gerund	Poss- <i>ing</i> comp. that has undergone Equi-NP Deletion	I finished <i>studying English.</i>	26, 32, 35, 40
4. Prep-Gerund (P-Ger)	Gerund which is preceded by a preposition	The pilot thought <i>of flying to Mexico.</i>	1, 5, 10, 15, 18, 22
5. Inf-NP	Infinitive complement whose subject remains in surface	John wants <i>me to go.</i> My father ordered <i>me to study.</i>	2, 16, 17, 27, 29, 33
6. <i>to</i> -deletion	Inf. comp. that has undergone <i>to</i> -deletion	We heard <i>the birds sing.</i>	3, 12, 13, 23, 28, 34, 39
7. Inf-Equi	Inf. comp. that has undergone Equi-NP Deletion	I want <i>to see it.</i>	7, 38, 41
8. Tense	Sequence of Tenses	He <i>thought</i> that he <i>would leave</i> on Monday.	21, 30, 31, 36, 37, 42
9. Surface structure subject	Subject of the comp. is obligatorily present in surface structure	I want <i>you to help them.</i> John hoped that it <i>wouldn't rain.</i>	4, 9, 19, 24, 27, 28, 29, 33, 34, 39
10. Perfect	Perfect tenses	She hopes <i>to have read the book by next week.</i>	6, 11, 14

3. Data analysis

The scoring procedure for the test followed Anderson's study.³⁾ The multiple choice section responses were scored either right or wrong. The translation section responses were scored with a partial point system as follows:

3 points: Correct complement choice; perfectly formed response

2 points: Correct complement choice; one error

1 point : Incorrect complement choice; or correct complement choice with two errors

0 point: No response; or incomplete response

In order to establish the order of difficulty I followed Anderson and used the "Ordering-Theoretic Method" (Bart & Krus, 1973). This method was first used in second language research by Dulay and Burt (1974). They wanted to cover the weakness of the older methods which assumed the simplistic view of acquisition order; it would be linear and can be ranked neatly. This new method, on the other hand, enables researchers to identify groups of structures that were acquired at roughly the same time and to describe the hierarchical order of the groups. Then, the acquisition order of structures in each group can be examined.⁴⁾

The following shows the way the data were gathered : each structure in the test has a binary score of either 1 or 0. A score of 1 was given if the structure had been acquired; 0 was given if it had not. The criteria for determining the score was set at 80% correct answer percentage.⁵⁾ The example of the procedure is shown in Table 2. It shows that this student (#003) answered correctly on 5 items out of 7 questions on *that*-clause, which amounted to 83%. Since the percentage exceeded the set level of 80%, a binary score of 1 was given to the student.

Table 2. Sample of the Procedure of the Data Analysis

Student (#003)	Structures	Test items	Percentage score	Binary score
	<i>that</i>	25, 30, 31, 36 37, 42	83% (5 correct)	1
	Prep-Gerund	1, 5, 10, 15 18, 23	67% (4 correct)	0
	<i>to</i> -deletion	3, 12, 13, 23 28, 34, 39	43% (3 correct)	0
	Gerund	26, 32, 35, 40	100% (4 correct)	1

Next, patterns of all the pairs of structures were tabulated with the binary scores. Table 3 shows the method of tabulating response patterns using only one pair (Inf-Equi & Inf-NP) as an example. It tests the validity of the hypothesis that Inf-Equi was ordered before Inf-NP.

Table 3. Example of Tabulating
Inf-Equi → Inf-NP (hypothesis tested)

Student	Inf-Equi	Inf-NP
#001	0	1
#002	1	1
#003	1	1
⋮		
⋮		
#009	1	0
#010	0	0
⋮		
⋮		
#104	0	1

There are four possible patterns of the scores for a pair of structures. For example, the pair above (Inf-Equi & Inf-NP) has the patterns as follows:

- 1, 1 Both Inf-Equi and Inf-NP have been acquired. (#002, 003)
- 1, 0 Inf-Equi has been acquired; Inf-NP has not. (#009)
- 0, 1 Inf-Equi has not been acquired; Inf-NP has. (#001, 104)
- 0, 0 Neither Inf-Equi nor Inf-NP has been acquired. (#010)

The "Ordering-Theoretic Method" only counts for the pattern '0, 1' which disconfirms the hypothesis. When the number of this disconfirmatory pattern responses was higher than a set level (in other words, the percentage of the disconfirmatory responses was higher than the set level), the hypothesis tested was rejected. In my study that level was set at 5% just as Anderson's was.⁶⁾ For example, in the case of the hypothesis above (Inf-Equi was ordered before Inf-NP), the percentage of the disconfirmatory pattern responses was 11.5%. Since this was way above the set tolerance level of 5%, the hypothesis would be rejected.

<Results>

The results are found in the form of the disconfirmatory matrix as shown in Table 4 along with Anderson's matrix in Table 5. The matrix shows the disconfirmatory levels of all the structures investigated in the study, and shows the order of difficulty at the left-hand column in the list of structures. For example, in Anderson's study, Inf-Equi was on the top of the list thus indicating that Inf-Equi was ordered before every other structure in that row since the disconfirmatory level of other structures did not exceed 5% against Inf-Equi. S. S. S. (surface structure subject) followed Inf-Equi, and Inf-NP followed S. S. S. in the order of difficulty.

Table 4. Disconfirmation Matrix
Percentages (N=104 Japanese students)

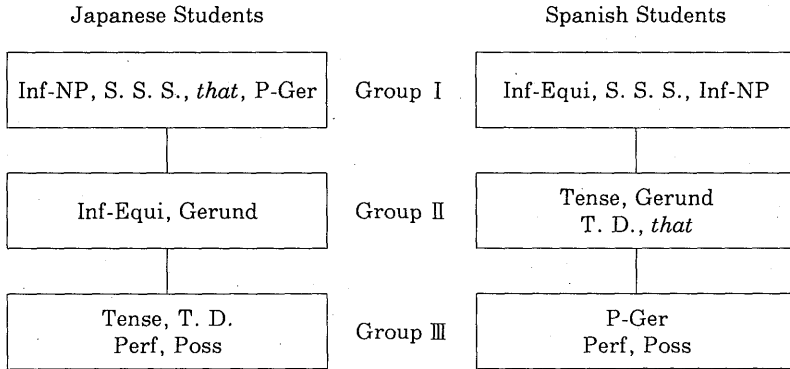
	Inf-NP	S. S. S.	that	P-Ger	Inf-E.	Gre.	Tense	T. D.	Perf.	Poss.
Inf-NP		10.6	11.5	17.3	18.3	13.5	6.7	1.9	1.0	0
S. S. S.	14.4		12.5	22.1	20.2	13.5	7.7	3.8	1.9	1.0
that	20.2	17.3		25.0	26.0	15.4	1.0	5.8	2.9	3.8
P-Ger	13.5	13.5	12.5		16.3	11.5	9.6	2.9	1.9	3.8
Inf-Equi	11.5	12.5	10.6	13.5		14.4	6.7	6.7	3.8	3.8
Gerund	25.0	22.1	18.3	27.9	33.7		13.5	7.7	3.8	2.9
Tense	32.7	29.8	18.3	39.4	39.4	26.9		12.5	7.7	7.7
T. D.	40.4	39.4	37.5	46.2	52.9	34.6	26.9		9.6	6.7
Perf.	51.0	48.1	44.2	55.8	60.6	41.3	31.7	20.2		9.6
Poss.	56.7	53.8	51.9	64.4	66.3	47.1	38.5	24.0	16.3	

Table 5. Disconfirmation Matrix in Anderson's Study
Percentage (N=180 Spanish students)

	Inf-E.	S. S. S.	Inf-EP	Tense	Ger.	T. D.	that	P-Ger.	Perf.	Poss.
Inf-Equi	2.0	.6	1.0	.6	0	.6	0	0	0	0
S. S. S.	11.7	0	.6	0	0	0	0	0	0	0
Inf-NP	24.4	14.4	3.3	3.9	2.0	1.6	1.0	0	0	0
Tense	36.7	27.2	14.4	7.9	7.2	2.7	2.0	0	0	0
Gerund	40.6	31.1	20.0	12.8	6.7	5.0	2.0	.6	0	0
T. D.	45.6	36.1	24.4	17.2	11.7	8.3	4.4	.6	.6	.6
that	48.9	39.4	26.7	16.7	13.3	11.7	6.1	1.0	1.6	1.6
P-Gre.	55.0	45.6	32.2	21.7	16.7	13.9	12.2	0	1.0	1.0
Perf.	61.7	56.2	37.8	26.7	21.1	17.2	14.4	7.7	1.6	1.6
Poss.	62.3	53.3	38.9	27.2	22.8	17.8	15.0	7.7	2.7	2.7

In my study, first of all, the figures of disconfirmatory levels were higher than Anderson's. The number of the figures which did not exceed 5% were also fewer than that of Anderson's. They indicated that the order of difficulty was not as clear as Anderson's. As seen in Table 4, all the top four structures (Inf-NP, S. S. S., *that*, P-Ger) each had three disconfirmatory figures which were under 5%. Although they can be ordered according to the overall percentage of the disconfirmatory levels and the average percentage of those figures that are under 5%, it seems desirable to put them into one group since the differences among them are slight. In order to show the better picture of the results of my study, the hierarchical order of difficulty is shown in Table 6 along with that of Anderson's for the purpose of comparison. This format seems to better serve as a means to show the results since the main purpose of using the "Ordering-Theoretic Method" was to identify groups of structures that were acquired at the same time and to see the relationships of those groups. The purpose was to avoid a simplistic view of acquisition order as being linear and additive and to show a hierarchical order of groups of structures.

Table 6 Hierarchical Order of Difficulty



There were some similarities and differences in the results of two studies. As for sentential complements, both groups of the students found Inf-NP easy to acquire than Gerund, which was intermediate in difficulty for both groups.

The differences were found in the order of two structures: Inf-Equi and *that*-clause. For Spanish students, Inf-Equi was one of the least difficult structures to learn, while *that*-clause was intermediate in difficulty. On the other hand, for Japanese students, *that*-clause was easy to learn, while Inf-Equi was more difficult.

As for other structures investigated in connection with sentential complements, both groups of the students found Perfect and Possessive most difficult to acquire; in the meantime S. S. S. (surface structure subject) was one of the easiest for both groups.

There was a big difference in the order of P-Ger (preposition-gerund). While P-Ger was one of the hardest structures to acquire for the Spanish students, it was one of the easiest for the Japanese.

There were also some differences in the order of Tense and T. D. (*to*-deletion). These structures were found to be intermediate in difficulty for the Spanish students, yet the structures were among the most difficult for the Japanese students.

<Discussion>

What are the causes for these differences found in the results of the two studies? One answer might be found in the influence of native language transfer. Anderson, in her study, pointed out language transfer as one of three possible determinants of the order. Language transfer can be positive or negative according to its effects on the success (or failure) in learning a new language. It is positive when the structures in both languages are the same and a learner can produce correct answers by automatically using the L1 (first language) structures in the L2 (second language) performances. On the other hand, it is negative when the L1 structures are different from L2's and a learner makes errors resulting from the influence of the L1 structures, and this might explain the different order of Inf-Equi and *that*-clause in the studies.

As I have already shown, the Spanish students performed well on Inf-Equi, while the Japanese did not. There were three questions used to test the mastery of Inf-Equi: one multiple choice, and two translations. There did not seem to be much difference in the performance of both groups of the students on the multiple choice. The Spanish students must have done well on the question as well as the translations since the successful performance on all three items is necessary for Inf-Equi to be listed as one of the easiest structures to learn. The Japanese students also performed well on the multiple choice: 86% of the students answered it correctly. Therefore, the difference seemed to have been made in the two translations which are seen below:

#44 Trataré de hacerlo.

I will try to do it.

#51 Quiero verlo.

I want to see it.⁷⁾

Some effects of positive language transfer can be found in these structures. In #44, '*tratar*' (the original form of '*trataré*') in Spanish is equal to '*try*' in English, it would have been clear to the students that the infinitive form ('*to do*') was required for the translation just as it ('*de hacer*') was required for the Spanish sentence.⁸⁾ In #51, '*querer*' (the original form of '*quiero*') is equal to '*want*

to,' and 'querer ver' is equal to 'want to see.' The students did not have difficulty in supplying Inf-Equi form for the answer. Thus the effect of positive transfer seemed to account for the successful performance on Inf-Equi by the Spanish students.

The Japanese students, on the other hand, were not able to take advantage of such positive transfer since there was no such equivalence between the Japanese structures and the English ones. The translation questions in the test are seen below:

#38 私はそれをしてみましょう。 #51 私はそれを見たいです。

I will try to do it.

I want to see it.

There was no clear hint (equivalence) of infinitive form in the question #38. The students answered it in many different ways: 'I will try it,' 'I will do it,' 'I ll try to it (incorrect grammar),' etc. Part of the reason for this, however, lay on the translation question itself. The sentence '私はそれをしてみましょう' left a room for more than one answer to the students: either 'I will try (do) it' or 'I will try to do it' was possibly correct. In fact, 58% of the students used the Inf-Equi form and were able to answer the question correctly; 33% of the students chose the sentence 'I will try (do) it' for the answer. A question remained whether or not they would be able to use Inf-Equi form if they knew it was necessary to use it. If the students who chose 'I will try (do) it' for the answer were able to use Inf-Equi as well, it means that 91% of the students would have answered the question correctly. If this is the case, it will certainly affect the order of difficulty: based on the fact that the students performed well on another translation as well as on the multiple choice, they would have done well on all three items. Therefore, there is a possibility that Inf-Equi may be listed in Group I instead of Group II. Yet more significant number of questions are needed to clarify the possibility.

In #51 there was, again, no such equivalence between the Japanese structure and the English one. The students, however, performed well on the question. More than 90% of the students answered it correctly. Part of the reason for this seems to derive from the

students' familiarity with the form '*want to*': it is one of the basic forms that the students learn first and use quite often in English conversation classes.

Although there remained some speculation about the Japanese students' performance on Inf-Equi (they might have done better than the results here show if the elicitation task had been more specific about asking for Inf-Equi), it would be safe to say that positive native language transfer certainly was helpful to the Spanish students, and that the effect of positive transfer seemed to have made a difference in the performance by two groups.

The difference in the order of *that*-clause in two studies may also be explained by the effect of this language transfer. The Japanese students did very well on *that*-clause, but the Spanish students did not. There were five translation questions in Japanese as seen below:

- #30 彼は月曜日に出発しようと思いました。
He thought that he would leave on Monday.
- #31 ジョンは、自分が英語を上手に話すと思っています。
John thinks that he speaks English well.
- #36 彼は、それを確信していると言いました。
He said that he was sure of that.
- #37 私は出発しようと思います。
I think that I will leave.
- #42 ジョンは、自分（ジョン）がそれをしたと言いました。
John said that he had done it.

As shown above, all the Japanese questions had the particle '*to*' (と). This '*to*' is a quotative particle which directly follows the quotation or the quoted thought.⁹⁾ Thus the particle '*to*' indicates that within a sentence there is another embedded sentence. The Japanese students seemed to have been well aware of the function of the particle '*to*' being equivalent to the function of *that*-clause, and had no difficulty in supplying the *that*-clause for these questions. There was some variation in the answers for #36 and #42 because some students used direct speech (*He said, "I'm sure of*

that." / John said, "I did it.") instead of indirect speech. Most of the students, however, used *that*-clause and performed well on these questions. Therefore, the effect of positive language transfer seemed to have helped the Japanese students to perform well on *that*-clause.

On the contrary, The Spanish students seemed to have suffered from the effect of negative transfer and did not do well on *that*-clause. There were 6 translation questions in Spanish in Anderson's test. They are as follows:

#32 El pensaba que saldría el lunes. He thought that he would
leave on Monday.

#33 Juan cree hablar bien el inglés. John thinks that he speaks
English well.

#42 Dijo que estaba segure de ello. He said that he was sure
of that.

#43 Pienso irme. I think that I will leave.

#52 Dijo eatar seguro de ello. He said that he was sure
of that.

#55 Pablo dijo haberlo hecho. Pablo said that he did it.

As seen above, there were two items (#32 and 42) which had '*que*' in the questions. The *que* form is equal to *that*-clause, positive transfer can be expected to occur. The rest of the questions contained the Spanish infinitive forms, and there was a potential for negative transfer to occur when the students had to produce *that*-clause. Anderson reported that when the *que* form was in the question, the percentage of correct answer for *that*-clause was 61.4%, and that when the infinitive form was in the question, the percentage was only 42.5%.¹⁰⁾ It was a little surprising that only 61.4% of correct answers were recorded in the place where the effect of positive transfer had been expected. The effect of negative transfer was evident in the poor performance on the questions with the Spanish infinitive. Thus it seems that positive transfer was helpful for the Japanese students, and negative transfer was hindrance to the Spanish students in production of *that*-clause.

Anderson pointed out length as another possible determiner of the order of difficulty.¹¹⁾ Length here means the number of morphemes present in the surface structure of the sentence. It has been suggested that the second language learner tends to encode information in the fewest possible morphemes, which would ease the burden of communication. She saw some evidence in the elementary learners' tendency to omit functors (verb inflections, prepositions, articles, etc.) in their writing. She also saw some evidence in the results of her study on the sentential complements. For example, it was pointed out that Inf-Equi (*I want to see it*), a shorter form, was ordered before Inf-NP (*I want him to see it*), a longer form; Gerund (*I resent going*), a shorter form, was ordered before Possessive-*ing* (*I resent his going*), a longer form.

In my study Gerund was ordered before Poss-*ing*, and this agreed with Anderson's result. But the difference might be found in the order of Inf-Equi and Inf-NP: Inf-NP might have been ordered before Inf-Equi, which would disagree with Anderson's study. As we have already seen, there is a need for further studies to confirm the order since one of the translations which tested Inf-Equi had other possible answers which did not necessarily have to use Inf-Equi. Therefore, as far as this particular test is concerned, the hypothesis about length was not supported.

I should also note that the way the students answered on the question #38 did not support the hypothesis about length either. As it has been reported, for the translation #38 '私はそれをしてみましょう,' 59% of the students chose the answer 'I will try to do it' (a longer form), and 33% of the students chose 'I will try(do) it.' They did not necessarily prefer a shorter form.

Derivational complexity was also another possible determiner of the order of difficulty. Anderson, in her study, found it to be a poor predictor of the order, and so did I in my study. The idea of derivational complexity came from the hypothesis that the more complex a structure is, the more difficult to acquire the structure. The complexity was measured by how many times a structure had

to go through the transformational rules to have the form of the surface structure from the deep structure. Anderson used Lakoff's (1968) analysis of complexity of sentential complements, and explained why derivational complexity was a poor determiner in her study.^{1,2)} The examples of the analysis are found below:

1. Three transformations:

<i>that</i>	He said <i>that he would leave</i> .
Poss- <i>ing</i>	He resented <i>her leaving</i> .
Inf-NP	She persuaded <i>him to leave</i> .

2. Four transformations:

T. D.	She let <i>him leave</i> .
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3. Five transformations:

Inf-Equi	He wanted <i>to leave</i> .
Gerund	He regretted <i>leaving</i> .
P-Ger	He planned <i>on leaving</i> .

The results of Anderson's study did not support the idea of derivational complexity as a determiner of the order of difficulty. Inf-Equi, for example, had to go through 5 transformations before it could take the surface structure seen above, therefore it was considered to be one of the most difficult structures to acquire. Anderson, however, found Inf-Equi easy for the Spanish students. According to the analysis above, Possessive-*ing* went through only three transformations, and was supposed to be an easy structure to acquire. Yet the result in Anderson's study showed the opposite: it was one of the most difficult structures to learn.

The result of my study did not support the hypothesis about derivational complexity either. The analysis above shows that P-Ger had to go through 5 transformations, therefore, it should be a very difficult structure to acquire. My result, on the contrary, showed that it was one of the least difficult structures for the Japanese students.

<Conclusion>

There were both similarities and differences in the results of

Anderson's study and my study. The results are summarized as follows:

1. There was a hierarchical order of difficulty in my study, which was different from Anderson's. The degree of difficulty among the structures in my study seemed to be smaller than that in Anderson's.
2. Similarities were found in the order of certain structures: S. S. S. and Inf-NP were easy to acquire for both groups of the students. Gerund was intermediate in difficulty, and Perfect and Possessive were most difficult for both groups.
3. Differences were also found in the results: the order of Inf-Equi and *that*-clause was somewhat reversed in the two studies. The Spanish students found Inf-Equi easy to acquire, but the Japanese students found it intermediate in difficulty. The Japanese students found *that*-clause easy, but the Spanish students found it intermediate.

Three possible determinants of the order of difficulty, which Anderson examined in her study, were reexamined about their validity. The summaries of the reexamination are as follows:

1. The comparison of the results of the two studies indicated that language transfer played an important role for creating the differences in the order of difficulty.
2. Length accounted partially for the order in Anderson's, but in my study length did not seem to account for the order, although there remained a need for further studies to confirm the order in my study.
3. Derivational complexity was a poor determinant in Anderson's study. It was not a reliable determinant in my study either.

There are needs for the further study in order to better understand the validity of the hypothesis about a common acquisition

order of structures. More data of this type of cross-sectional studies are needed from L2 learners of different L1 backgrounds. Not only cross-sectional, but longitudinal studies are needed: the data from the same subjects over a period of time would be very helpful to see whether or not there is a change of order of difficulty across the length of time. This will give us more insights on the acquisition order. Both Anderson's and my study were conducted in the form of a discrete point written test. Different types of tests will also be helpful for the assessment of the results found in the previous studies. The data are needed from more natural types of tests such as free writing, spontaneous speech, etc.

I hope that the results of this study here will be some help in identifying the structures that are difficult for the Japanese students, and in creating curriculum which will meet the needs of the students. I also hoped that the study here will be useful as a step for examining the hypothesis of a common order of difficulty in learning English structures, and that it will lead to a better understanding of acquisition order of the structures by L2 learners of English.

Notes

1) Marina K. Burt, "Error Analysis in the Adult EFL Classroom," *TESOL Quarterly*, 9/1 (1975), p. 56. In this study she looked into the judgement of native speakers about the comprehensibility of the students' writings she gathered. She tried to find which types of errors cause the listener (or reader) to misunderstand the intended message by the students.

2) Janet I. Anderson, "Order of Difficulty," in *Second Language Research: Issues and Implications*, ed. William C. Ritchie (N. Y.: Academic press, 1978), p. 98-100.

3) *Ibid.*, p. 93.

4) Heidi Dulay, Marina Burt and Stephen Krashen, "Acquisition Order," *Language Two*, p. 222-224. This section contains a concise de-

scription on the "Ordering-Theoretic Method."

5) Although the criteria in Dulay and Burt's study was set at 90%, I followed Anderson's criteria which was set at 80%.

6) In Dulay and Burt's study the tolerance level was set at 6%. But in this study I followed Anderson's which was set at 5%. The reason for following Anderson's study for both the acquisition criteria and the tolerance level was to simplify the procedure of the comparison of two studies (Anderson's and my study).

7) The numbers on the translations correspond to the numbers of the translation questions in Anderson's study.

8) Noboru Miyagi and Yoshiro Yamade, *Diccionario Del Español Moderno*, (Tokyo: Hakusuisha, 1990) This dictionary was used for the study of these Spanish structures found in this paper.

9) Eleanor Harz Jorden and Mari Noda, *Japanese: The Spoken Language*, (New Haven: Yale Univ. Press, 1987), p. 300-301. (in Part 1) & p. 152 (in Part 2)

10) Anderson, op. cit., p. 100.

11) Ibid., p. 97-98.

12) Ibid., p. 98.

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Appendix

正しいものを一つ選び下線の所にその記号を入れなさい。

1. The pilot thought of _____ to Mexico.

- a. to fly
- b. flying
- c. flied
- d. fly

2. John wants _____.

- a. my going
- b. I go
- c. me to go

- d. that I go
3. We heard the birds _____.
- a. to singing
 - b. sing
 - c. to sing
 - d. sings
4. Mary thought that _____.
- a. she should
 - b. should have
 - c. should had
 - d. should she
5. They prevented him from _____ his girlfriends.
- a. see
 - b. to see
 - c. he saw
 - d. seeing
6. She hopes _____ the book by next week.
- a. to have read
 - b. to be read
 - c. to have reading
 - d. to have been read
7. She offered _____ the child's books.
- a. carrying
 - b. to carry
 - c. carry
 - d. carried
8. I remember _____ it last week.
- a. you finish
 - b. you to finishing
 - c. your finishing
 - d. you to finish
9. John hoped that _____ rain.
- a. wouldn't
 - b. wouldn't it

-
- c. wouldn't be
d. it wouldn't
10. Mary concentrated on _____ the problem.
a. to solve
b. solving
c. be solving
d. solved
11. Tom thought that he _____ talking too much.
a. may had been
b. may have been
c. may had to be
d. may to have been
12. I saw him _____ the book.
a. to take
b. took
c. take
d. to taking
13. The teacher let the students _____ class early.
a. leaving
b. to leave
c. to be leaving
d. leave
14. The boy admits _____ him last week.
a. have seen
b. having seen
c. have been seeing
d. have been seen
15. We plan on _____ this today.
a. finish
b. to finish
c. finishing
d. to be finishing
16. My father ordered _____.
a. me to study

- b. my studying
 - c. me studying
 - d. I study
17. Mary wanted _____.
- a. that they play
 - b. them to play
 - c. their playing
 - d. they played
18. The man talked about _____ in Chicago.
- a. live
 - b. to live
 - c. lived
 - d. living
19. John was afraid _____ an explosion.
- a. there would be
 - b. would to be
 - c. would be
 - d. would there be
20. We regret _____ here.
- a. John not to be
 - b. John's not being
 - c. John's not to be
 - d. John not to being
21. Bill hopes that Mary _____ play tennis tomorrow.
- a. will to
 - b. will
 - c. would have
 - d. would
22. We are used to _____ on week-ends.
- a. studying
 - b. study
 - c. studied
 - d. have studied
23. My father made me _____.

-
- a. to work
 - b. to be working
 - c. work
 - d. worked

24. I am afraid that _____ an accident.

- a. there might be
- b. might there be
- c. might be
- d. might to be

25. We think _____ enough time.

- a. to have
- b. we have
- c. having
- d. to be having

英訳しなさい。

- 26. 私は英語を勉強しおわりました。
- 27. 私はあなたに行かないように命令します。
- 28. 私はその子を泣かせ（てしまい）ました。
- 29. 私はあなたに彼らを手伝ってほしい。
- 30. 彼は月曜日に出発（leave）しようと思いました。
- 31. ジョンは、自分が英語を上手に話すと思っています。
- 32. 彼女はタバコを吸のをやめました。
- 33. 私はあなたに行ってほしかった。
- 34. 母は私にテレビを見させません。
- 35. 彼は仕事をしおわりました。
- 36. 彼は、それを確信してと言いました。
- 37. 私は出発しようと思います。
- 38. 私はそれをしてみましょう。
- 39. 彼らは私を出発させなかった。
- 40. 私はあなたの家に行くのが楽しいです。（enjoy）
- 41. 私はそれを見たいです。
- 42. ジョンは、自分（ジョン）がそれをしたと言いました。