

# Acquisition of Two-clause Structures by Japanese ESL Learners: What Factors Make Some Structures More Difficult to Acquire than Others?

NAGAI Makoto<sup>1)</sup>

**Abstract:** This study discusses the acquisition of two different groups of two-clause structures by Japanese ESL learners; group A includes sentences with relative pronoun and relative adverb clauses, and group B includes compound and complex sentence combination patterns. The results of the experiment in this study suggest that there could be general principles in the cognitive aspect over the different syntactic categories.

**Keywords:** Syntactic structures, Relativized clauses, Compound/complex sentences, Cognitive strains

## 1. Introduction

Some syntactic structures are more difficult for ESL learners to acquire than others, although they superficially look similar to each other. There have been many studies that discussed the natural order of acquisition of some structures, that compared the factors that make some structures difficult, within the same grammatical categories, (e.g. relative pronoun structures only). This study, however, discusses the acquisition of two different groups of two-clause structures by Japanese ESL learners; group A includes sentences with relative pronoun and relative adverb clauses, and group B includes compound and complex sentence combination patterns. These two groups are mixed because, from the learners' point of view, they are the same in the sense that they both have "two-clause structures." By examining superficially similar structures in these two different categories, this study aims to find more general cognitive strains for ESL learners analyzing syntactic structures.

## 2. Preceding Studies

In the category of the relative pronoun clauses only, there have been some studies about the order of difficulty. Kawauchi(1988) and Itoh(2001) examined the order of difficulty among the four types of relative pronoun clause structures; types called "SS," "SO," "OS," and "OO" (explained in section 3). The order in Kawauchi(1988) was OS>OO>SS>SO, and the order in Itoh(2001) was OS>OO>SS=SO(the most difficult one being on the right side); they reported almost the same order.

Nagai(2010), the present researcher, added two relative

adverb clause structures called "SA" and "OA," and studied the order of difficulty among the six types. Nagai(2010) proposed that it is more significant to divide those types into two groups containing three easy types and three difficult ones, rather than determining the order, because there was a clear gap between the two groups. The feature of the types in the difficult group was relativized clauses that function as the subjects of the main structures.

Through the studies on cognitive constraints, Kuno(1974) and Schuman(1980) proposed a principle that interruptions and embeddings by sub-structures in the main structures make it harder to acquire the structures, meaning SS and SO are more difficult than OO and OS. This hypothesis seems to be in accordance with the order of difficulty in English as L2 for Japanese students, as far as the relative clause structures are concerned.

## 3. The Target Structures of the Present Study

The target structures discussed in the present study are as follows; including three more types called "IC," "sM," and "Ms," which were added to the six types in NAGAI(2010).

TYPES:

**SS:** The subject of the main sentence includes a relative pronoun in the subjective case.

(e.g. The boy who speaks Japanese can't speak English.)

**OS:** The object of the main sentence includes a relative pronoun in the subjective case.

(e.g. James met a man who had big dogs.)

**SO:** The subject of the main sentence includes a relative pronoun in the objective case.

(e.g. The girl who I met yesterday likes Bob.)

**OO:** The object of the main sentence includes a relative

---

1) 東京都立産業技術高等専門学校 ものづくり工学科

pronoun in the objective case.

(e.g. John will meet some people who Ann knows well.)

**SA:** The subject of the main sentence includes a relative adverb.

(e.g. The school where my brother studies is far from the station.)

**OA:** The object of the main sentence includes a relative adverb.

(e.g. Lucy visited the company where her father worked.)

**IC:** Two independent clauses are connected by a conjunction (i.e. conjoined sentences).

(e.g. Kate likes coffee and her sister likes green tea.)

**sM:** The subordinate clause with a conjunction at the head precedes the main clause.

(e.g. When you are young, you should read many books.)

**Ms:** The main clause precedes the subordinate clause with a conjunction in between.

(e.g. Bill will stay at home because it is rainy.)

#### 4. The Hypotheses

Below are the hypotheses about the factors that make some syntactic structures difficult. Each one was examined by the results in the experiment referred to in the next section.

1 Those that include a relative clause (pronoun or adverb) are more difficult than those that simply have two independent clauses connected by a conjunction.

2 Those that include another subject-predicate pair between the main subject and the main predicate verb are more difficult than those that do not, i.e. those that are temporarily interrupted by a sub-structure are difficult, as claimed in Kuno(1974) and Schuman(1980).

3 Those that could be completed as a sentence halfway through (even if the reader stopped reading halfway through) are easier than those that could not be completed as a sentence until the reader reads the sentence right through to the end, i.e. additional information is easier when tagged on at the end than when embedded.

#### 5. The Experiment

The factors that make some syntactic structures difficult were discussed based on the results of the word-order arrangement test. The subjects of the experiment involved in this study were the second-year students of the Tokyo Metropolitan College of Industrial Technology (n=43). The test included nine sentences of different types, the same as

the nine example sentences in Section 3 (SS through Ms types). The task for the students was to arrange the word order to complete an English sentence based on the Japanese sentence. The last word was fixed so that the expected sentence structures should be used; especially the sub-to-main/main-to-sub complex structures with a conjunction in the right position needed to be fixed.

#### 6. The Results and Discussions

Chart 1

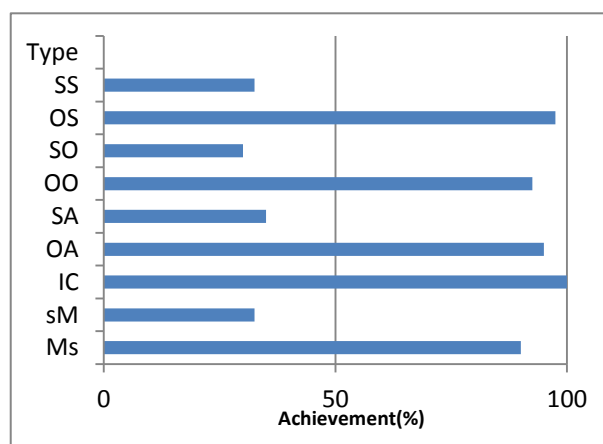
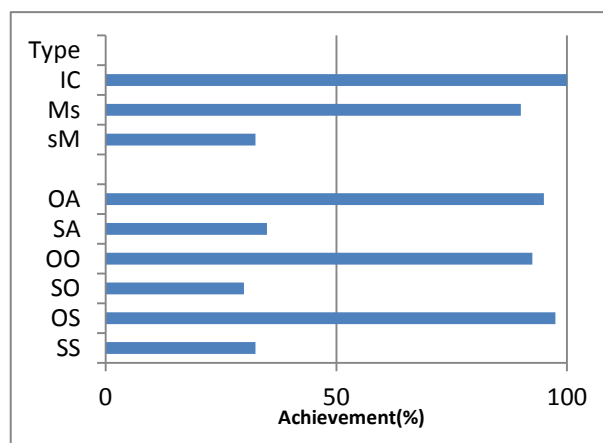


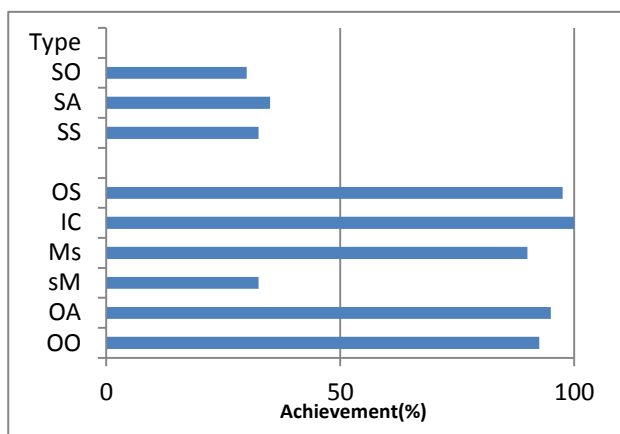
Chart 1 shows the average ratios of the correct answer to the question in each structure type (in the order shown in Section 3). In Charts 2 through 4, these structure types are divided into two groups, according to one of the three hypotheses.

Chart 2



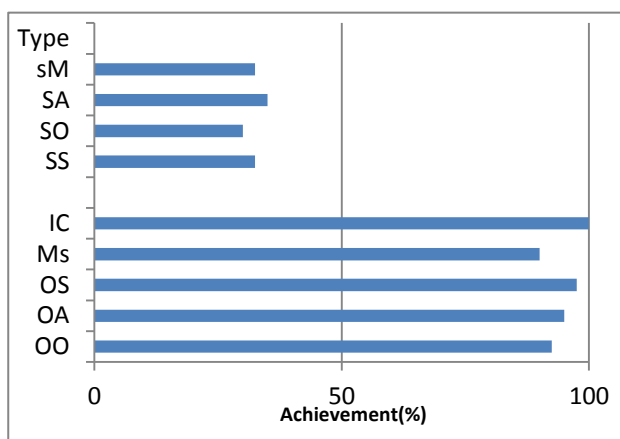
The two groups in chart 2 are divided according to Hypothesis 1. Hypothesis 1 can be supported if the scores for the structures in the bottom are better than the ones in the top, but they are not. Therefore, Hypothesis 1 cannot be supported.

Chart 3



These two groups in chart 3 are divided according to Hypothesis 2. Hypothesis 2 can be supported if the scores for the structures in the bottom are better than the ones in the top. Since there is one remarkable exception, Type sM, it is problematic to support Hypothesis 2.

Chart 4



These two groups in chart 4 are divided according to Hypothesis 3. Hypothesis 3 can be supported if the scores for the structures in the bottom are better than the ones in the top, and obviously they are. Hypothesis 3, therefore, can be supported.

## 7. Conclusion

It is common that most grammatical structures are taught within the same category. However, the results of the present study suggest that there could be more general principles in the cognitive aspect over the different syntactic categories, such as “Additional information is easier to understand and add when coming at the end of a sentence than when embedded.” If the instructors consider such ideas, it will be beneficial for the learners who need to

overcome many cognitive strains in the process of learning, and do not need to be concerned about the differences of grammatical categories.

## 8. References

- [1] 伊藤彰浩:『共時的アプローチによる英語関係節の習得研究』. 東京:リーベル出版. 101-113. 2001.
- [2] Kawauchi, C. : Universal Processing of Relative Clauses by Adult Learners of English. *JACET Bulletin*. No.19. 19-36, 1988.
- [3] Keenan, E. L. and Bernard Comrie. : Noun Phrase Accessibility and Universal Grammar. *Linguistic Inquiry*, Volume 8, Number I. 63-99, 1977.
- [4] Kuno, S. : The Position of Relative Clauses and Conjunctions. *Linguistic Inquiry*, Volume 5, Number I. 117-136, 1974.
- [5] Nagai, M. : How Can We Cope with the Order of Difficulty in the Acquisition of Relative Clause Structures? 全国高等専門学校英語教育学会「研究論集」第 29 号. 91-100, 2010.
- [6] 大関浩美:「なにが関係詞節習得の難易を決めるのか — 研究の動向及び日本語習得研究への示唆 — 」 日本言語文化学会『言語文化と日本語教育 2003 年 11 月増刊特集号. 第二言語習得・教育の研究最前線 -2003 年版- 』 32-49, 2003.
- [7] 齋藤 (大関) 浩美: 「連体修飾詞の習得に関する研究の動向」 日本言語文化学会『言語文化と日本語教育 2002 年 5 月増刊特集号. 第二言語習得・教育の研究最前線: あすの日本語教育への道しるべ 』 45-69, 2002.
- [8] Schuman, J. H. : The Acquisition of English Relative Clauses by Second Language Learners. In Scarcella, Robin C. and Stephen D. Krashen(Eds) *Research in Second Language Acquisition*, Mass: Newbury House, 118-131, 1980.
- [9] Sheldon, A. : On the Role of Parallel Function in the Acquisition of Relative Clauses in English. *Journal of Verbal Learning and Verbal Behavior*, 13, 272-81, 1974.
- [10] Slobin, D. : Cognitive Prerequisites for the Development of Grammar. In Furgason, C.A. and D. Slobin(Eds) *Studies of Child Language Development*. NY: Hoit, Rinehart and Winston, 175-208, 1973.

Appendix 1: The Test

複合文を作る（主語＋述語の組み合わせが2つある文）

( )コース( )番( )

日本文の意味になるように、与えられた語群を並べ替えなさい。ただし文末に来る語（群）は指定されている。また、先頭に来る語が大文字で書いてあるとは限らない。

(A) James は大きな犬を飼っている男に会った。

[ who / big / James / a man / met / had ] dogs.

\_\_\_\_\_ dogs.

(B) 雨が降っているので Bill は家にいるだろう。

[ because / Bill / is / it / at home / will stay ] rainy.

\_\_\_\_\_ rainy.

(C) Kate はコーヒーが好きでその姉は緑茶が好きなのです。

[ her sister / Kate / coffee / likes / likes / and ] green tea.

\_\_\_\_\_ green tea.

(D) Lucy は父親が働いている会社を訪れました。

[ where / her / father / visited / Lucy / the company ] worked.

\_\_\_\_\_ worked.

(E) John は Ann がよく知っている人たちに会うでしょう。

[ Ann / meet / John / some people / who / will ] knows well.

\_\_\_\_\_ knows well.

(F) 日本語を話すその少年は英語が話せない。

[ speak / speaks / the boy / can't / who / Japanese ] English.

\_\_\_\_\_ English.

(G) 僕が昨日会った女の子は Bob を好きなんだ。

[ I / likes / the girl / yesterday / who / met ] Bob.

\_\_\_\_\_ Bob.

(H) 若い時には本をたくさん読んだ方がよいよ。

[ should read / you / you / young / are / when ] many books.

\_\_\_\_\_ many books.

(I) 僕の兄が勉強している学校は駅から遠いんです。

[ my brother / is / where / studies / far / the school ] from the station.

\_\_\_\_\_ from the station.