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The Effect of Reading on the Acquisition of English Relative Clauses

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Abstract

49 adult acquirers of English as a second language took two tests probing restrictive relative clause competence. The amount of reported pleasure reading done by subjects were the only significant predictor of both measures. Neither years of formal study nor length of residence in the United States was a significant predictor. These results are consistent with the input hypothesis.

There is strong evidence that pleasure reading is causally linked to first language literacy development, specifically to growth in reading comprehension (KRASHEN, 1993), writing style (KRASHEN, 1984), vocabulary (NAGY, HERMAN and ANDERSON, 1985), spelling (SMITH, 1982; KRASHEN and WHITE, 1991) and grammatical development (CHOMSKY, 1972). Research in second language literacy has thus far produced similar results; there is evidence that pleasure reading is the (or at least a) major cause of competence in reading comprehension (ELLEY and MANBUGHAL, 1982; ELLEY, 1991; PILGREEN and KRASHEN, 1993), writing style (JANOPOULOS, 1986), vocabulary (DAY, OMURA, and HIRAMATSU, 1991; PITTS, WHITE and KRASHEN,

1989; DUPUY and KRASHEN, 1993) and spelling (POLAK and KRASHEN, 1988). Our purpose in this study is to determine the effect of pleasure reading on one aspect of grammatical development in second language acquisition, restrictive relative clauses. This grammatical form was chosen because acquirers of English as a second language typically have difficulty mastering it in all of its manifestations (see below).

Procedure

Subjects were 49 international students at the University of Southern California who spoke Korean as a first language. All had attended the university for at least one year at the time the study was conducted. All had finished their undergraduate education in South Korea and had studied English for at least seven years in Korean public schools using a grammar-based methodology that emphasized conscious knowledge of grammatical rules. Some subjects reported that they had received additional grammar-based instruction from tutors in private language schools in Korea, but no detailed information about methodology was provided.

Subjects were asked to fill out a questionnaire and take two tests probing restrictive relative clause development: (1) a grammaticality judgment test, and (2) a translation test (see appendix). All materials were mailed to the subjects. 150 packets were mailed, and 49 completed packets were returned. This return rate is reasonable, considering the amount of time the tasks required, and the fact that the packets were mailed during winter break and some students were out of town. Subjects could take as much time as they wished to complete the tests. There was, of course, no way to insure that subjects did not receive help with the tests.

The questionnaire asked subjects about years of grammar study, length of residency in the United States, and the amount of pleasure reading they had done in English. Total amount of reading done was determined by summing responses from questions asking

subjects the number of years they had read newspapers, news magazines, popular magazines, literature, fiction and non-fiction. Subjects selected from four alternatives: 0 years (coded 0), 1-2 years (coded 1), 3-5 years (coded 2), or more than five years (coded 3). Internal consistency reliability using coefficient alpha was determined to be .85 for the composite score.

The grammaticality judgment test consisted of 24 sentences. Subjects were asked to read the sentences and indicate whether the sentences were grammatical or not. No time limit was set, but subjects were asked not to change their first answer. Six types of restrictive relative clauses were included, representing six types of relativization:

1. subject: She is the woman who helped us.
2. direct object: He is the man whom I can trust.
3. indirect object: The lady for whom John sang a song is my aunt.
4. object of preposition: We should choose the vacation for which we are fitted.
5. genitive: He is the novelist whose books are widely read.
6. object of comparison: The building that our house is smaller than is a hospital.

Four error types were included:

1. Incorrect relative pronoun: *She is the woman which helped us.
2. Pronoun retention: *The student you saw him is smart.
3. Omission of preposition: *This is the man whom I sent a letter.
4. Nonadjacency of antecedent and pronoun: *The diary was found in his room which he wrote.

Grammaticality of the test sentences was judged by four judges who spoke English as a first language. Interrater reliability was .91.

The translation test consisted of 20 Korean sentences, which subjects were asked to translate into English. Five types of relativization were represented (subject, direct object, indirect object, object of preposition, and genitive; the object of comparison type does not exist

in Korean), each by four sentences. In order to reduce worries about spelling and vocabulary, English translations of some words and phrases were provided.

Items in both tests were randomly arranged. Correct answers received one point, and incorrect answers no points. Thus, a perfect score on the grammaticality test was 24, and a perfect score on the translation test was 20 points. Each test was scored by two raters; all disagreements in ratings were settled by discussion. The reliability for the grammaticality judgment test was .75 and for the translation test it was .82 (KUDER-RICHARDSON KR-20).

Results

The descriptive statistics presented in table 1 show sufficient variability in years of formal instruction in English, length of residence in the United States, and amount of pleasure reading to avoid attenuation effects. Mean score on the grammaticality judgment test was 16.39 (s.d. = 2.38) and the mean score on the translation test was 15.02 (s.d. = 2.67).

Table 1 : Descriptive Statistics

Years studied English	percentage of students
5-6 years	35%
7-10 years	29%
more than 10 years	37%
Length of residence in the USA	percentage of students
1-2 years	20%
3-5 years	35%
more than 5 years	45%
type of material read	percentage of subjects
	years 0 1-2 3-5 more than 5
newspapers	24 33 22 20
news magazines	37 33 14 16
popular magazines	37 35 16 12
literature and fiction	49 24 6 20
non-fiction books	31 18 16 35

Table two presents intercorrelations of all variables involved. While formal study and length of residence show practically no relationship with both measures of relative clause competence, amount of reading correlates quite well with both measures.

Table 2 : Intercorrelations of variables

	LOR	reading	gramm. judg.	trans.
formal study	.024	.049	.099	.064
length of residence		.25	.18	-.053
amount of reading			.53	.44
grammaticality judgment				.36

LOR = length of residence

The extremely low correlations seen in table 2 among the independent variables makes multicollinearity unlikely. Thus, two simultaneous multiple regression analyses were performed to assess the relationship between the number of years of formal study, length of residence, and amount of reading with the two measures of relative clause proficiency.

Table 3 : Multiple Regression Analyses

Dependent Variable: Performance on Grammaticality Judgment Test

predictor	beta	b	standard error	t	p
amount of reading	.516	.273	.069	3.98	.0002
formal study	.072	.201	.350	.57	.568
length of residence	.052	.159	.396	.40	.690

$r^2 = .29$; $p < .05$

Dependent Variable: Performance on Translation Test

predictor	beta	b	standard error	t	p
amount of reading	.476	.282	.081	3.49	.001
formal study	.045	.140	.412	.34	.735
length of residence	-.174	-.595	.466	-1.28	.208

$r^2 = .22$; $p < .05$

As seen in table 3, amount of pleasure reading was the only significant predictor of both measures, and was a far better predictor than formal study or length of residence in the United States.

Discussion

Pleasure reading was an easy winner in this study; it was by far the strongest predictor of performance on both tests and was the only significant predictor. These results are consistent with previous research and extend findings on the effect of reading to include restrictive relative clauses in second language acquisition. The results also provide support for the more general Input Hypothesis (KRASHEN, 1985), and are counter to rival hypotheses that claim that instruction is the cause of language and literacy development. It is interesting that reading predicted performance on a written test in which subjects had time to focus on form. This result is consistent with the hypothesis that acquired knowledge is available for use on form-based as well as communicative measures (KRASHEN, 1981).

The failure of length of residence to be a significant predictor is reasonable. Experience interacting in the informal environment should only have an impact on those aspects of language present in the informal environment; apparently, complex structures such as restrictive relative clauses are not frequent in everyday conversation.

While one can always argue that with better instruction, form-based teaching will have a significant effect, the results of this study, as well as those of many others (KRASHEN, 1992, 1993) clearly put the burden of proof on those who believe in formal instruction.

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Appendix

Grammaticality Judgment Test

Read the following sentences and put an O next to any sentence that you think is grammatical or an X next to any sentence that you think is ungrammatical. Please DO NOT CHANGE ANY OF YOUR ANSWERS. Your first decision is what we want.

1. The building that our house is smaller than is a hospital.
2. This is the library from which I borrowed these books.
3. She is the woman which helped us.
4. We dislike people their opinions differ from ours.
5. I am working with the girl whom Tom taught English.
6. I had a cat whom I loved very much.
7. The person whom Mary is taller than her is Carol.
8. We should choose the vocation for that we are fitted.
9. The girl who told me that sad news was my friend.
10. I live in a house the roof of which is red.
11. He is the man whom I can trust.
12. The lady whom John sang a song for is my aunt.
13. I have an old vase part of which is broken.
14. The student you saw him is smart.
15. The tree was cut down yesterday under which we used to rest.
16. The boy whom I gave the present to is now sick.
17. The man is handsome to whom I sent flowers.
18. The lady whom Judy is prettier than arrived yesterday.
19. Anyone is welcome who want to come.
20. This is the house of which I spoke yesterday.
21. The mountain is very high whose top is covered with snow.
22. The tabel which mine is bigger than it is blue.
23. I saw the girl that had the book.
24. The diary was found in his room which she wrote.

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Translation Test

다음 문장을 영문어로. 한번 쓴 것은 그제지 하지 않습니다.

1. 나는 John 이 영어를 가르치던 그 소년을 만났다.
2. 내가 영어를 가지고 있는 과목 (subject)은 영어이다.
3. 김현 교수 (Gardening)는 미국인들이 대부분과 다른 (most other)을 소비하는 취미 (hobby)이다.
4. 내가 좋아하는 저 사람은 영어 선생이다.
5. 그는 그의 책이 널리 읽히는 소설가이다.
6. 나는 영어를 말하는 사람을 알고 있다.
7. 나는 내가 좋아하는 사람을 찾았다.
8. 유학생이 많은 대학은 한국 학생들이 오지 않는 곳이다.
9. 그가 쓴 그 책은 나의 여자 영재이다.
10. 내가 편지를 쓴 그 선생님은 지금 편지에 없다.
11. 그녀는 Mr. Kim 의 인형 (doll)을 만들어서 선물로 그 소녀이다.
12. 학생들 모두가 자신의 그 사람은 영재이다.

영문 시험 결과

13. 당신은 내가 그 일을 할 열의 (enthusiasm)를 감수할 수 없습니다.
14. 내가 좋아하는 그 남자는 성공할 것이다.
15. 폭풍 예보자들 (Storm forecasters)은 폭풍이 올것이고 있는 차도를 결정할 수 있다 (can determine) .
16. 저것은 지난 일요일에 돈을 낸 가게 (store)이다.
17. 그녀는 Mr. Kim 이 사랑하는 소녀이다.
18. 일부 학생들이 외국어인 그 학교는 곧 폐교될 것이다 (will close) .
19. 정거장에 역사는 같은 종류.
20. 내가 선물을 보던 그 남자는 나의 여자석이다.

***** THANK YOU VERY VERY MUCH! *****