

English Restrictive Relative Clauses & Accessibility Hierarchies: Application to Taiwanese Freshman English Courses

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Abstract

Certain research results suggest that studying and practicing relatively difficult types of RRC's (restrictive relative clauses) allows foreign language (FL) learners to improve on not only the focused types but also on less difficult types, without spending additional time or effort (Gass 1982; and Eckman, Bell, & Nelson 1988). If this actually is true and can produce more or less permanent gains for EFL (English As A Foreign Language) speakers' RRC's, then this sort of approach may be able to be applied to achieve a more time-efficient and effort-efficient way to teach and learn RRC's, and perhaps some other aspects of language as well.

One requirement of such an approach is that the grammatical difficulty orders be reasonably clear and accurate. This pilot study examines the accuracy of five proposed RRC difficulty orders (accessibility hierarchies / developmental sequences), as these are among the most researched and discussed of any proposed such orderings (Gass 2001).

Using grammaticality-judgment and sentence-combining tasks, data on RRCs was elicited from one EFL speaker. More RRC types were treated in this study than were mentioned in those hypotheses. The results are not very consistent with any of the five hypotheses on RRC inherent levels of difficulty/accessibility and/or developmental/learning sequences.

Key Words: Accessibility Hierarchies, Developmental Sequences, English As A Foreign Language; Foreign/Native Language Learning, Learning Orders, Restrictive Relative Clauses.

Introduction

In their first year in college, most Taiwanese students take two semesters of Freshman English. Although its goals are flexible, most students need help with at least three aspects of English: general, non-technical English listening and speaking abilities; academic English reading and writing proficiencies for their departments; and problem areas they have in general, non-technical, basic English. To provide significant help with all that in the limited time allotted is difficult.

Certain research results suggest that studying and practicing relatively difficult types of RRC's (restrictive relative clauses) allows foreign language (FL) learners to improve on not only the focused types but also on less difficult types, without spending additional time or effort (Gass 1982; and Eckman, Bell, & Nelson 1988). If this actually is true and can produce more or less permanent gains for EFL (English As A Foreign Language) speakers' RRC's, then this sort of approach may be able to be applied to achieve a more time-efficient and effort-efficient way to teach and learn RRC's, and perhaps some other aspects of language as well.

One requirement of such an approach is that the grammatical difficulty orders be reasonably clear and accurate. Using grammaticality-judgment and sentence-combining data elicited from an EFL speaker, this pilot study examines a number of proposed difficulty orders (accessibility hierarchies / developmental sequences) for RRC's, as these are among the most researched and discussed of any proposed such orderings in language (Gass 2001).

The first hypothesis is the Perceptual Difficulty Hypothesis of Kuno 1974 (based on Greenberg 1963). This proposes that sentence-edge RRC's are easier for people to process (and so possibly easier to learn) than sentence-medial RRC's, and hence more common in languages.

The second is the Parallel Function Hypothesis of Sheldon 1974. This claims that RRC's are easier for children and adults in learning and processing either native or foreign languages when the missing part of the RRC has a "parallel function" (that is, the same grammatical function) as the noun that the RRC modifies.

A third proposal is the Noun Phrase (NP) Accessibility Hypothesis of Keenan and Comrie 1977, Keenan and Comrie 1979, and Comrie and Keenan 1979. This suggests there is a semantic/grammatical-relation based "accessibility hierarchy" continuum for RRC's in all human languages such that certain types of RRC's are more accessible and common, and that if a given type exists in a particular language then all the types that are more accessible and more

common than it also exist in that language, perhaps meaning that the relatively accessible and common types would be easier for children and adult to learn in either an NL or an FL and that if someone has learned a certain type of RRC in a language then all the types in that language more accessible and common than it would also have been learned. The hypothesized NP Accessibility Hierarchy from most to least accessible is: Subject (S) > Direct Object (DO) > Indirect Object (IO) > Major Oblique Case O (MOCO) > Genitive (G) > Comparative Object (CO), where MOC includes PPIO prepositional phrases (PP's) that are IO's but excludes PP's that are time, place, and manner adjuncts (TPMA's).

A fourth hypothesis on RRC developmental/learning sequences and RRC difficulty/accessibility hierarchies is what might be called the Relativizer Developmental Sequence Hypothesis of Schumann 1980. This proposes a natural developmental order in the acquisition of RRC's, with the "zero relativizer / null pronoun", acquired first, "pronominal relativizers" (that is, regular, non-relative pronouns used by a learner as relative pronouns) acquired next, and regular "relative pronouns" (including relative pronouns and the relative complementizer "that") acquired last.

A fifth proposal is the (Cognitive) Operating Principles Hypothesis of Slobin 1973, Slobin 1985, Andersen 1984, and Andersen 1990. This hypothesizes certain "operating principles" for all language learning, which provide guidelines for learners as they develop their interlanguages and move towards their target languages (TL's). Two main "operating principles" proposed by Andersen 1984 and 1990 are the One-To-One Operating Principle and the Formal Determinism Operating Principle. The former proposes that for each intended meaning there should be a clear, invariant form, and the later proposes that aspects of a TL that are clearly and transparently encoded in the input a learner receives should be easiest to learn and so learned earlier than other less clearly and transparently encoded aspects. The One-To-One Principle predicts that the types of English RRC's which only have one clear invariant way to be formed (genitive RRC's, which can only be formed with the relative pronoun "whose") should be easier to acquire than those that have more than one form (all other RRC types in English, which can all be formed either with a "wh-" relative pronoun or with "that", and/or with a "null pronoun"). The Formal Determinism Principle predicts that English RRC's which use relative pronouns and the relative complementizer "that" should be easier to acquire than ones which use a "null pronoun", because the relative pronoun and the relative complementizer overtly signal and mark the RRC while the

so-called "null pronoun" does not.

Method

Participant

There was one participant, mid-twenties in age. The participant spoke Japanese as a NL, and had studied English, French, and Chinese as FL's, English for ten years in Japan, from the first year of junior high through the fourth year of college in an English department. In addition, the participant had studied in a graduate program in the USA for several years prior to the study.

Procedure

In four different sessions, data on the participant's internalized English RRC system was elicited. The first two sessions involved grammaticality judgments on various English RRC-containing sentences (72 judgment items per session). The last two sessions involved combining two adjacent sentences into a single sentence with an RRC in it (36 combining task items per session).

In the first and second sessions, the participant was given a 5-point scale: good, probably good, unclear (don't know), probably bad, and bad, and was told to consider everything in the sentences besides the RRC's to be okay and to judge the sentences as good or bad solely on the basis of the RRC's in them. The participant's judgments and productions were scored as being either the "Same" as or "Different" from native speakers' (as judged by the English native-speaker author).

Results

The participant's scores ("Same" or "Different" re a native speaker) for the four sessions' judgments and combined sentences are given in the following tables.

Table 1: Comprehension Tasks & Production Tasks Results*

	Session 1		Session 2		Session 3		Session 4		Sessions 1-2		Sessions 3-4		Sessions 1-4	
	Sa	Di	Sa	Di	Sa	Di	Sa	Di	Sa	Di	Sa	Di	Sa	Di
S	3	5	7	1	4	0	4	0	10	6	8	0	18	6
DO	5	3	8	0	4	0	4	0	13	3	8	0	21	3
IO	2	6	6	2	3	1	3	1	8	8	6	2	14	10
TPMA	3	5	5	3	4	0	4	0	8	8	8	0	16	8
GS	4	4	6	2	3	1	2	2	10	6	5	3	15	9
GDO	8	0	8	0	1	3	0	4	16	0	1	7	17	7
GIO	8	0	8	0	0	4	0	4	16	0	0	8	16	8
GTPMA	7	1	8	0	0	4	0	4	15	1	0	8	15	9
CS	3	1	2	2	2	0	2	0	5	3	4	0	9	3
CO	0	4	2	2	0	2	0	2	2	6	0	4	2	10
Totals	43	29	60	12	21	15	19	17	103	41	40	32	143	73

* Sa = Same, Di = Different, S = Subject, D = Direct, O = Object, I = Indirect, T = Time, P = Place, M = Manner, A = Adverbial, G = Genitive, C = Comparative

Table 2: Sessions 1-2 Results Re Presence/Absence Of "That" & Resumptive Pronouns*

	Session 1		Session 2		Sessions 1-2	
	Same	Different	Same	Different	Same	Different
+That+ResPro	12	6	16	2	28	8
-That+ResPro	15	3	18	0	33	3
+That-ResPro	7	11	11	7	18	18
-That-ResPro	9	9	15	3	24	12
+That	19	17	27	9	46	26
-That	24	12	32	4	56	16
+ResPro	27	9	34	2	61	11
-ResPro	16	20	25	11	41	31

* ResPro = Resumptive Pronoun

The results do not support Kuno 1974's Perceptual Difficulty Hypothesis that DO-modifying RRC's should be easier than S-modifying ones (see Table 1). The participant's judgment results for DO-modifying RRC's (31:9) were somewhat better than those for S-modifying RRC's (25:15), which is somewhat in keeping with Kuno's hypothesis. The production results for S-modifying RRC's (17:3), however, were much more TL-like than those for DO-modifying RRC's (9:11), which is very much against Kuno's hypothesis.

The results also do not support Sheldon 1974's Parallel Function Hypothesis that "parallel function" cases should be easier to process than "non-parallel function" cases. Adding up the various S-S (including S-GS), S-(G)DO, DO-(G)S, and DO-(G)DO cases yields 19:5 for S-(G)S versus 14:10 for S-(G)DO, which is consistent with the prediction; but 18:6 for DO-(G)DO versus 20:4 for DO-(G)S, which is contrary to the prediction.

In addition, the results do not support a strict version of Keenan and Comrie's NP Accessibility Hierarchy either. For example, as seen in Table 1 the results for all the (non-G, non-C) S cases are 18:6, and those for the (non-G, non-C) DO cases are 21:3, the opposite of the prediction there. The results for that type IO and TPMA are also the reverse of the prediction, 14:10 for the IO cases and 16:8 for the TPMA cases. The results for the G cases are predicted to be worse than that, but at 63:33 are about as high as the results for the TPMA cases, although these results should be viewed cautiously, because none of the sentences to be judged used the possessive relative pronoun ("whose"), but instead used a form which does not exist in English – although it could exist, following a non-genitive pattern. It might be possible to loosen this hypothesis some such that these data results would fit it, except for the CS 9:3 results. Only CO is mentioned in the hypothesis, but it seems that the hypothesis would have to place CS next to CO in "accessibility", which is not at all in accord with these results. Based on the results, CS is much easier than CO, and in fact is about as easy as (non-G, non-C) S, whose results were 18:6.

Schumann's hypothesis predicts that it will be harder for learners to learn RRC's that have a relative pronoun or relative complementizer ("that") than to learn RRC's that have no marker. The data results there are not consistent with that prediction, however. As seen in Table 2, the judgment data results for RRC's with "that" (+T) were 46:26, lower than the 56:16 results for RRC's with no relative marker; but in the production data, all the RRC's were produced with a relative pronoun or the relative complementizer, with not a single one produced without a RRC marker, even though the participant's native language has no relative pronouns or relative

complementizers.

With respect to Andersen's Formal Determinism Operating Principle, the data just mentioned for RRC's with and without an RRC marker is inconsistent with the prediction that RRC's with a clear and transparent relative marker should be easier for both perception and production. Although the judgment data is consistent with that prediction, the production data is completely at odds with it since every RRC produced had a relative marker. With respect to the One-To-One Operating Principle, it also appears that the data results are not in accord. As seen in Table 1, the overall results for G cases are 63:33 while those for non-G, non-C cases are somewhat higher at 69:27. In addition to those overall figures, the result rates for individual types of a number of non-G cases (such as S and DO) are considerably higher than those for the G cases, also contrary to the prediction.

Conclusion

This study's results are not very consistent with any of the hypotheses on RRC inherent levels of difficulty/accessibility and/or developmental/learning sequences. Gass 1980 and Aarts & Schils 1995 suggest that probably none of the hypotheses by itself can account completely for the developmental sequences of all FL learners of English RRC's, although Gass 2001, on the basis of Gass 1979a and Gass 1979b, asserts that Keenan and Comrie's NP Accessibility Hierarchy is correct except for genitive RRC's. One thing noticeable is that in this study more RRC types were delineated and used in eliciting data from the participant than were mentioned in those hypotheses, and this apparently impacts the elicited data. For example, the participant's CS RRC's are very much more native-speaker-like than the CO ones and even more so than the IO and TPMA ones, yet none of the hypotheses examined mention such RRC's. In addition, it seems clear from the data that not all G RRC's are equally difficult for the participant, although the hypotheses treat G RRC's as if they are all equally hard/easy to learn and use. More careful and systematic analysis and treatment of RRC's seems necessary for making progress in determining any possible RRC difficulty/accessibility hierarchy and/or developmental/learning sequence.

As has been pointed out in various studies, such as Aarts and Schils 1995 and Gass 1980, it may well be that more than one principle or factor influences the developmental sequence / learning order of the various RRC types. Some possibly significant influences might come from the learners' native languages, the particular EFL education they have received, and individual

and culturally based learning preferences and strategies.

Although a well-specified and precise order of RRC's from "easiest/first-learned" to "hardest/last-learned" is not yet known, if it does exist, for individual languages or for human language in general, the findings noted earlier from Gass 1982 and Eckman, Bell, and Nelson 1988 that instruction on "harder" RRC types generally helps students test better short-term-wise on uninstructed "easier" types are encouraging. Language teachers and learners can try using some of the limited time available on what they feel are "harder" RRC's and see if progress can be made not only on them but on the "easier" ones, too.

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