EFL Learners Talking to Each Other: Task Types and the Quality of Output

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The notion of "comprehensible output," or language production pushed toward the target norm ("pushed output"), is relevant in the EFL context, where learners of English typically interact with other learners. The study reported in this article investigated whether interlocutors in nonnative speaker-nonnative speaker (NNS-NNS) interactions reformulate their utterances in more grammatical language in response to signals of incomprehension, as they do in talking to native speakers. The study observed how NNSs behave linguistically under different task conditions, with a focus on their grammaticality, incomprehension signals, and subsequent reformulations. It was found that pushed output does occur to some extent in NNS-NNS interaction, but this did not coincide with the degree of overall grammaticality.

EFL 学習者同士の会話におけるアウトプットの質の分析

日本のような EFL 環境では、同じ母国語を持つ学習者同士で英語を話 すことが多い。その際にも、ネイティブ・スピーカーと話すときと同じよ うに、相手が理解できなかった発話をより文法的には正しく言い直すとい う行動 (pushed output) が見られるだろうか。本稿は、3つの異なった作 業における学習者同士の会話で、英語がどのような形をとるかを、文法的 正しさ、理解できなかったときの合図、それに対する反応、といった点か ら分析した研究の報告である。この研究では、EFL 学習者同士の会話でも pushed output はある程度起こるが、その量と発話全体の文法的正確さの 数は一致しないという結果が得られた。

1. Introduction

Where do language learners stand as interactional partners for other learners? In the current theories of second language acquisition, interactional modifications, such as confirmation and comprehension checks and clarification requests, are regarded as requisite to the development of learners' receptive and productive capacities. These have been found to exist not only in interaction between native speakers (NSs) and learners, but also between learners—and to serve similar functions (e.g., Chaudron, 1983; Duff, 1986; Gaies, 1983; Gass & Varonis, 1985; Long, 1985; Porter, 1986; Seliger, 1983; Varonis & Gass, 1982), thus justifying nonnative (NNS) speakers as legitimate input providers.

In recent years, focus has been directed also to the role of learners' output. As more and more data are gathered through immersion studies (e.g., Lambert & Tucker, 1972; Plann, 1977; Swain, 1985) and from studies of fossilized learners (e.g., Schmidt, 1983), it is becoming clear that input is not the sufficient condition for reaching native-speaker level. Swain (1985) found, through research on French immersion students' linguistic competence, that although comprehensible input had been abundantly available to NNSs for as long as seven years, their grammatical performance was not equivalent to that of NSs. Swain concludes that the impact of input and interaction on grammatical development has been overstated in previous research, and that comprehensible input alone is not enough for grammatical competence to develop adequately. Whereas Krashen (1981) saw the role of output as only that of generating comprehensible input, Swain claims that it provides the opportunity for learners to meaningfully use their linguistic resources, and that:

In order for native-speaker competence to be achieved, . . . the meaning of "negotiating meaning" needs to be extended beyond the usual sense of simply "getting one's message across." Simply getting one's message across can and does occur with grammatically deviant forms and sociolinguistically inappropriate language. Negotiating meaning needs to incorporate the notion of being pushed toward the delivery of a message that is not only conveyed, but that is conveyed precisely, coherently, and appropriately (pp. 248-249).

Swain calls this sort of output "comprehensible output," meaning that the message is made comprehensible and acceptable to the NSs, and is therefore target-like.

Subsequent research by Pica and her associates (Pica, 1987; Pica, Holliday, Lewis, & Morgenthaler, 1989), which operationalized the construct of "comprehensible output" to provide it with direct empirical grounding, tested whether interaction with NSs actually made the learners' output more target-like. Pica (1987) found that in an openended discussion task this did happen, although the learners were given only limited opportunities to reformulate their utterances which were incomprehensible to the NSs. The results from Pica et al. (1989), in which three different tasks were used, suggest that the type of task could, to a certain extent, influence the number of opportunities that NSs provide learners to reformulate their imperfect utterances. Further, the type of interactional modifications (specifically clarification requests and confirmation checks, which the researchers called "incomprehension signals") had a relationship with whether or not learners actually responded to the opportunities by making their subsequent utterances more target-like. The question now is whether learners talking to other learners can also be moved somehow to make their output more grammatical through reformulation of utterances.

2. The Present Study

The notion of "pushed output"—language production pushed toward the target norm—is especially relevant in an EFL context such as Japan. In an environment where exposure to the target language outside the classroom (and very often inside the classroom as well) is limited, the learners often have no choice but to practice the second language (L2) with other learners who share the same first language (L1). Previous research suggests that the frequency of interactional modification sequences is lower among interlocutors of the same L1 background (Doughty & Pica, 1986). It is also feared that the amount of grammatical input might be restricted by a steady diet of group activities (cf., Pica & Doughty, 1985), and that the development of "classroom dialects"—non-target varieties of the L2 intelligible only among learners in the same classroom—is possible, such as is observed by Hatch (1978), Lambert and Tucker (1972), Plann (1977), Selinker (1975), and Taylor (1982).

2.1 Purpose of the Study: Research Questions

The general purpose of this paper is to identify some of the conditions under which learners talking to other learners in the EFL context are "pushed," if at all, to produce, when given signals by their partners, output that is more grammatical and target-like. The term "target-like" rather than "comprehensible" will be used in this paper, for it is easy for interlocutors sharing the same L1 to understand each other's interlanguage (Porter, 1986), and comprehensibility of output, unlike in NS-NNS interaction, does not guarantee its approximation to the target norm.

The variables that have been focused on in previous research as influencing the quality of NNS output, besides interlocutor ethnicity (e.g., Duff, 1986; Porter, 1986), include: task type (e.g., Duff, 1986; Gass & Varonis, 1985; Pica et al., 1989), gender (e.g., Gass & Varonis, 1985; Pica et al., 1989), and proficiency (e.g., Pica & Doughty, 1985; Porter, 1986). From among these, task type is taken up in this study as the one that is most relevant to the school setting, where the teaching of English typically takes place. It can fairly realistically be, and actually is, manipulated, while the human factors mentioned above are often beyond control of the classroom teachers. Adapting the design in Pica et al. (1989), this study used three types of tasks, namely informationgap (one participant has all the necessary information); jig-saw (each participant has some information that the others need); and open-ended discussion (the participants talk freely on a given topic)-to create situations with varying degrees in the precision of information required. The highest degree of precision would be called for in the informationgap task, less in the jig-saw task, and the least in the open-ended discussion.

The present study (a) measured the overall grammaticality of the language, which was Swain's (1985) original concern, and (b) observed

the learners' behavior in talking to other learners sharing the same L1 under different task conditions, in terms of incomprehension signals and subsequent reformulations. The following are the specific research questions asked:

- 1. Will the overall grammaticality of the language produced differ across tasks?
- 2. Will the number of incomprehension signals, that is, clarification requests and confirmation checks, differ across tasks?
- 3. Will clarification requests and confirmation checks be made in different proportions across tasks?
- 4. Will the amount of reformulations made in response to incomprehension signals differ across tasks?
- 5. Which incomprehension signal will be responded to more with reformulations?

2.2 Design

2.2.1 Subjects

The subjects for this study were 12 high school seniors (ages 17-18) at a private girls' school in Japan, enrolled in an elective class of English conversation which met for three 45-minute sessions a week and mainly engaged the students in communicative activities. They were all Japanese nationals sharing the same language background, with proficiency levels ranging from lower to higher intermediate. At school they had had English for six years, four hours a week, in teacher-fronted classes with grammatical syllabuses. They had all taken part in short-term (one month) homestay programs in English-speaking countries during the previous two years, but had not lived abroad for extended periods. Besides this elective class, the subjects were taking several reading and grammar classes of English, all of which were in the teacher-fronted, lockstep format. For this study, the subjects were divided randomly into six pairs.

2.2.2 Tasks

The following list describes each of the actual tasks:

- 1. Information-gap. One of the interlocutors described a drawing of a tennis racket and directed the other to draw the same, providing detailed information as to its size, shape, and location on the paper. All the pairs had the same drawing, so that difference in the pictures would not influence the language produced.
- 2. Jig-saw. The task used a 10-frame picture sequence about a man who meets with repeated mishaps as he walks home. One of the interlocutors had five of the frames in proper sequence, and the rest were randomly arranged in a separate place together with seven extra pictures that had some features in common with one or more of the correct pictures. The other interlocutor had the other five correct frames in place, with five correct and seven extra pictures randomly arranged. The seven extra pictures were the same for both interlocutors. They were to try to reconstruct the original sequence by exchanging information.
- 3. Open-ended discussion. The subjects were to discuss their favorite pastime, a topic chosen for its personal nature—one which they would find easy to relate to. They were allowed to deviate from the topic during the course of the discussion.

Through pretesting with two pairs of students comparable to the subjects in the present study, it was found that at their level the tasks were challenging but not too difficult.

2.2.3 Data collection

The tasks were done in the researcher's office. The pairs were called in one by one, and each pair worked in isolation from the others. The subjects sat facing each other, and during the information-gap and jigsaw tasks a cardboard screen was placed between them so that they could not see their partners' pictures. They worked on all three tasks at one sitting but in different sequences, in order to avoid contamination of data by practice effect and/or fatigue. All the interactions, which were recorded on audio tape, were cut off after 15 minutes, whether or not the tasks had been completed.

2.3 Analysis

The first five minutes were ignored in the analysis, giving time for the speakers to "get into gear," so to speak. Each interaction thus resulted in a 10-minute sample. All the samples were transcribed and coded for c-units and their grammaticality, incomprehension signals, and reformulations in response to these signals.

A c-unit was defined as a "word, phrase, or sentence that in some way contributes pragmatic or semantic meaning to a conversation" (Duff, 1986, p. 153), and

a segment of NNS speech was not disqualified as a c-unit because it lacked or included incorrectly the copula, the impersonal pronoun it, an auxiliary verb, prepositions, articles, or inflectional morphology. (Brock, 1986, p. 52)

The measure of grammaticality adopted was that of Pica and Doughty (1985): the proportion of grammatical (i.e., containing no errors in morphology, syntax, or lexis) c-units out of the total number of c-units in each sample. Single-word c-units were excluded from this calculation. Those consisting solely of Japanese words were eliminated from the calculation of grammaticality, but were included in the analysis of incomprehension signals.

Incomprehension signals were identified on the following basis (cf., Long, 1980; Pica et al., 1987):

- 1. Clarification requests: Moves intended to elicit clarification of the preceding utterance, through wh-, yes-no, polar, disjunctive, uninverted, and tag questions and statements such as "I don't understand" and "Please repeat."
- 2. Confirmation checks: Moves immediately following the previous speaker's utterance to seek confirmation that it has been understood correctly, through repetition of all or part of the utterance. Reformulations were those responses that indicated any improvement at all toward the target norm compared to the original

utterances that had triggered the incomprehension signals, and were therefore not necessarily completely grammatical.

3. Results and Discussion

The results of data analysis indicate that L2 learners' output varies to a certain extent in quality depending on the type of task used to elicit the language.

Research Question one asked whether there would be a difference in the overall grammaticality of output across tasks. As shown in Table 1, it was found that the language produced during the open-ended discussion was the most grammatical of the three, and that made during the information-gap task was the least grammatical. The order is reversed in the case of the number of incomprehension signals (Research Question two), the subjects giving the largest number of signals when engaged in the information-gap task, fewer in the jig-saw task, and fewest in the open-ended discussion.

Task	Total	Grammatical output	Incomprehension signals		
	n	n weighted*	n weighted *		
IGT**	712	189 251.12	121 160.93		
JST**	946	312	101		
DSC**	780	337 408.72	72 78.12		
IGT vs	. JST vs	. DSC $X^2 = 38.99$	$X^2 = 26.45$ df = 2. p	< .05	
IGT vs	. JST***	* $X^2 = 16.55$	$X^2 = 18.60$ df = 1. p	< .05	
IGT vs	. DSC**	** $X^2 = 38.07$	$X^2 = 23.79$ df = 1. p	< .05	
JST vs.	. DSC**	* $X^2 = 22.32$	$X^2 = 8.99$ df = 1. p	< .05	
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 Table 1

 Comparisons of grammatical output and incomprehension signals in c-units across task

*IGT: information-gap task; JST: jig-saw task; DSC: open-ended discussion

Frequencies are corrected for the unequal amount of total output. *Yates correction factor for continuity is applied.

These results seem to reflect the nature of the three tasks in terms of the requirement for conveyance of information and the precision of the information conveyed (cf., Pica et al., 1989). In the open-ended discussion, there was no conclusion that had to be reached and no final configuration to be constructed; therefore the subjects were able to choose to say only what they wanted or knew how to say. (In fact, all the pairs deviated from the originally assigned topic after a time.) In the case of the information-gap task, on the other hand, in order to direct the partner to draw the picture precisely, the speaker had to try to give the information whether or not she knew how. The jig-saw task stands in the middle: Although conveyance of information was required to reach the goal, the speakers did not have to explain everything, since, in this task, the missing information was divided between the interlocutors and they had all the pictures being described by their partners. This is likewise reflected in the number of incomprehension signals made in the execution of each task. Pressure to clarify ambiguities is greatest for an information-gap task, whereas in the case of an open-ended discussion, incomprehension of certain information does not necessarily get in the way of overall interaction. Pica (1987) had noted that when NS-NNS pairs engaged in open-ended discussion, only a limited number of opportunities were given to the NNSs to reformulate utterances which were incomprehensible to the NSs; a parallel result was observed in NNS-NNS pairs in the present study.

No significant difference was found in the proportion of clarification requests and confirmation checks, nor in the total number of reformulated responses across the three tasks (Research Questions three and four). But of the two types of incomprehension signals, clarification requests led to more reformulations than confirmation checks did overall, although the information-gap task alone reflected this result (Research Question five). Tables 2 and 3 give more details of these results.

Simply stated, incomprehension signals were given most frequently on the information-gap task, and clarification requests led to more reformulated responses than confirmation checks, which in turn occured most on the information-gap task. It would, however, be rash to associate this directly with the task's effect on the learners' development in the L2. Some reservations should be kept in mind: First, the occurrence of a larger number of incomprehension signals (opportunities for reformulation) obviously does not in itself guarantee higher overall grammaticality in the language produced. The information-gap

Task Incompreher Total CL*			ision signals CF*		Reformulated responses		
n	n	w**	n	w**	n	w**	
IGT 121	81		40		29		
JST 101	51	61.2	50	60	26	31.2	
DSC 72	41	68.88	31	52.8	14	23.52	
Total 1	73		121				
IGT vs. JST vs. DSC			<i>X</i> ² =	= 2.83	$X^2 = 1.12$	df = 2, 1	
IGT vs. JST***			X2 :	= 2.53	$X^2 = 0.29$	df = 1, :	
IGT vs. DSC***			X2 =	= 1.47	$X^2 = 0.55$	df = 1, 1	
JST vs. DSC***			<i>X</i> ² =	: 1.08	$X^2 = 0.82$	df = 1, 1	

number of incomprehension signals.)

***Yates correction factor for continuity is applied.

task gave rise to more incomprehension signals, especially clarification requests—the sort of interaction that "pushes" the production toward the target norm—than the other two tasks did, but the interaction that occurred during this task also had the lowest grammaticality. On the other hand, although the pairs did not engage in much negotiation of meaning in the open-ended discussion, their interaction maintained the best-formed production. One is inclined to debate between the merits of opportunities for output to be "pushed," and the demerits of NNSs feeding each other malformed language (cf., Pica & Doughty, 1985).

type of incomprehension signal in c-units						
Task	CL n	RCL* n	CF n	R n	CF* weighted**	
IGT JST DSC	81 51 41	24 15 11	40 50 31	5 11 3	10.13 11.22 3.97	
Total	173	50	121	19	27.17	
Total*** $X^2 = 6.16$ df = 1, $p < .05$ IGT*** $X^2 = 5.64$ df = 1, $p < .05$ JST*** $X^2 = 0.29$ df = 1, nsDSC*** $X^2 = 2.43$ df = 1, ns						
*RCL: reformulated responses to clarification requests; RCF: reformulated responses to confirmation checks **Frequencies are corrected for the unequal number of incomprehension signals. ***Yates correction factor for continuity is ap- plied.						

Table 3				
Comparison of reformulations in response to each				
type of incomprehension signal in c-units				

At the same time, although it was found that the subjects, when given incomprehension signals, did reformulate their utterances toward the target norm, only a very few of these signals actually led to such reformulated responses. Other types of responses included: incorrect or irrelevant responses, repetition of incomprehension signals that contained grammatical errors, mere acknowledgment of signals (i.e., yes, uh-huh), and repetition of triggers which were grammatical to begin with (the partner did not understand the utterance although it was correct). Some of the signals received no responses whatsoever. It seems that a considerably large portion of incomprehension signalsinitiatives to negotiation of meaning-are wasted: The functions, if any, of those signals that are given and received but fail to be responded to overtly are still unclear (cf., Pica et al., 1989).

4. Conclusion

The present study, motivated by the notion of "comprehensible output" and the need for "pushed" output, investigated the quality of language produced between NNS interlocutorsunder different task conditions. Results indicate that "pushed" output does occur to some extent in NNS-NNS interaction, as it does in NS-NNS interaction, that is, incomprehension is dealt with by making subsequent utterances more grammatical.

This study is significant in that it was conducted in an EFL environment where exposure to the target language is limited and the learners' L2 interlocutors are most likely peers who share the same L1, so that this notion is especially relevant. It is significant also because it showed that in discussing the occurrence of incomprehension signals and reformulated responses one should probably take into consideration the degree of overall grammaticality as well. It is limited, however, because it used only one aspect of task types (i. e., precision of information required) as the variable influencing output—the results are examples of what happens in one specific situation. Other dimensions of task types should probably be explored, as well as conditions other than task types that bring about differences in the quality of output.

More studies of this sort need to be conducted so long as the issues referred to in the previous section remain unsolved: For instance, it would not be wise at this point to dismiss the role of confirmation checks (Gass & Varonis, 1985; Pica et al., 1989); and it is possible that one key to second language acquisition is to become aware that one's utterance has been incomprehensible and to make efforts to reformulate it (Ellis, personal communication), no matter what the overall shape of the resulting language. Conclusions concerning the effectiveness of NNS interactional partners as compared to NSs in "pushing" output must definitely wait.

This is a cross-sectional study which momentarily captures the effects of whatever language-learning experiences learners have had in

the past, and not necessarily what would happen in the future if the type of activities in the research project were to be continued. The incorporation of language input is never immediate (Lightbown, 1983), and therefore longitudinal studies are also critically needed.

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References

- Brock, C. A. (1986). The effects of referential questions on ESL classroom discourse. TESOL Quarterly, 20, 47-59.
- Chaudron, C. (1983). Foreigner talk in the classroom—An aid to learning? In H. W. Seliger & M. H. Long (Eds.), *Classroom oriented research in second language acquisition* (pp. 127-145). Rowley, MA: Newbury House.
- Doughty, C., & Pica, T. (1986). "Information gap" tasks: Do they facilitate second language acquisition? *TESOL Quarterly*, 20, 305-325.
- Duff, P. A. (1986). Another look at interlanguage talk: Taking task to task. In R. R. Day (Ed.), *Talking to learn* (pp. 147-180). Rowley, MA: Newbury House.
- Gaies, S. (1983). The investigation of language classroom processes. *TESOL Quarterly*, 17, 205-217.
- Gass, S. M., & Varonis, E. M. (1985). Task variation and nonnative/nonnative negotiation of meaning. In S. M. Cass & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 149-161). Rowley, MA: Newbury House.
- Hatch, E. (1978). Apply with caution. Studies in Second Language Acquisition, 2, 123-143.
- Hatch, E. (1983). *Psycholinguistics: A second language perspective*. Rowley, MA: Newbury House.
- Krashen, S. D. (1981). The "fundamental pedagogical principle" in second language teaching. *Studia Linguistica*, 35, 50-70.
- Lambert, W. E., & Tucker, R. (1972). Bilingual education of children: The St. Lambert experiment. Rowley, MA: Newbury House.

- Lightbown, P. M. (1983). Exploring relationships between developmental and instructional sequences in L2 acquisition. In H. W. Seliger & M. H. Long (Eds.), *Classroom oriented research in second language acquisition* (pp. 217-245). Rowley, MA: Newbury House.
- Long, M. H. (1980). Input, interaction, and second language acquisition. Unpublished doctoral dissertation, University of California at Los Angeles.
- Long, M. H. (1985). Input and second language acquisition theory. In S. M. Gass & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 377-393). Rowley, MA: Newbury House.

Pica, T. (1987). Interlanguage adjustments as an outcome of NS-NNS negotiated interaction. *Language Learning*, 38, 45-73.

- Pica, T., & Doughty, C. (1985). Input and interaction in the communicative language classroom: a comparison of teacher-fronted and group activities. In S. M. Gass & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 115-132). Rowley, MA: Newbury House.
- Pica, T., Holliday, L., Lewis, N., & Morgenthaler, L. (1989). Comprehensible output as an outcome of linguistic demands on the learner. *Studies in Second Language Acquisition*, 11, 63-90.
- Pica, T., Young, R., & Doughty, C. (1987). The impact of interaction on comprehension. TESOL Quarterly, 21, 737-758.
- Plann, S. (1977). Acquiring a second language in an immersion classroom. In H. D. Brown (Ed.), On TESOL '77 (pp. 213-225). Washington, D.C.: TESOL.
- Porter, P. A. (1986). How learners talk to each other: Input and interaction in taskcentered discussions. In R. R. Day (Ed.), *Talking to learn* (pp. 200-222). Rowley, MA: Newbury House.
- Schmidt, R. (1983). Interaction, acculturation, and the acquisition of communicative competence. In N. Wolfson & E. Judd (Eds.), Sociolinguistics and language acquisition (pp. 137-174). Rowley, MA: Newbury House.
- Seliger, H. W. (1983). Learner interaction in the classroom and its effect on language acquisition. In H. W. Seliger & M. H. Long (Eds.), *Classroom oriented research* in second language acquisition (pp. 246-267). Rowley, MA: Newbury House.

Selinker, L. (1975). Interlanguage. IRAL, 10. 209-231.

- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. M. Gass & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 235-253). Rowley, MA: Newbury House.
- Taylor, B. P. (1982). In search of real reality. TESOL Quarterly, 16, 29-42.

Varonis, E., & Gass, S. (1982). The comprehensibility of non-native speech. Studies in Second Language Acquisition, 4, 41-52.



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