

COMMUNICATIVE TASK PERFORMANCE AND SECOND LANGUAGE ACQUISITION: DO TASK FEATURES DETERMINE LEARNER OUTPUT?

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INTRODUCTION

For many decades tasks have been used in the field of general education as important classroom pedagogy promoting a discovery approach to learning. Tasks have also been widely employed in research fields such as psychology and sociology as elicitation devices to study human cognitive and behavioral phenomena. However, it is only since the 1980s that tasks have become important in the field of second language learning (SLL), first as research instruments to study classroom interaction in the target language and later as an influential component of curriculum design. Today, few would dispute the critical role of tasks in both language acquisition research and pedagogical contexts (see the two 1993 surveys edited by Crookes and Gass on the role of tasks in SLL theory and practice). In fact, it can be suggested (Long and Crookes, 1992) that the concept of 'task' constitutes a basic unit of analysis for all classrooms because when teachers or researchers ask what is taking place during a lesson, the question is not what method of instruction is being used, but rather what the students are actually doing.

This paper reviews various task definitions and classifications, examines theoretical assumptions about the importance of task performance in the language acquisition process, discusses the methodology for analyzing task talk, and then presents a research report suggesting that the design features characterizing a particular task may be critical in determining the type of language produced by learners during its performance.

WHAT IS A TASK?

During the period that tasks have been used in SLL, there has been considerable evolution of the basic concept. This can be traced by examining researchers' changing definitions of the term over time. In 1983, Michael Long, one of the first linguists

to study classroom interaction, defined a task as “a piece of work or activity from everyday life, undertaken for self or others, done freely or based on reward”. In 1985, Rod Ellis, another major researcher in the field of language acquisition, identified a task as “an initial (teacher) question followed by talk required to resolve demands set by the question”. In an important cross-disciplinary review written at a time when tasks were beginning to become prominent in SLL, the general concept of task was expanded and defined as follows:

a piece of work or an activity, usually with a specified objective, undertaken as part of an education course, at work or used to elicit data for research (Crookes, 1986: 1)

Crookes observed that tasks used in the SLL situation tend to consist of pairs or small groups of participants organized to perform a problem solving activity, an arrangement designed to mimic natural interaction between native speakers and non-native speakers.

A similar definition came out the English as a Foreign Language (EFL) situation. Writing in 1987, the Indian linguist Prabhu, who developed and implemented an extensive task-based curriculum in India, defined a communication task as an interactive activity which requires learners to negotiate meaning and to arrive at an outcome through some process of thought.

One of the most prominent researchers using tasks to investigate SLL is Teresa Pica. In her extensive research on classroom interaction, Pica and her associates (Pica and Doughty, 1985; Doughty and Pica, 1986; Pica, 1987; Pica, Doughty and Young, 1987; Pica, Holliday, Lewis, Berducci and Newman, 1991; Pica, Lincoln-Porter, Paninos and Linnell, 1986) have defined communicative tasks as activities carried out through language according to procedures for communication which required task participants to linguistically encode and act upon information. Adopting a similar information processing view, David Nunan (1989) defined the communicative task pedagogically: a task is a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form. He added that the task should have a sense of completeness, being able to stand alone as a communicative act in its own right.

In a recent publication, Pica and her co-workers (Pica, Kanagy and Falodun, 1993) reviewed various definitions and descriptions of tasks used in both SLL teaching and research and identified two common features: (1) tasks are *goal-oriented*; that is, the task participants have to work towards some sort of a solution, and (2) there are *activities* which must be performed to reach the task solution. Thus, the participants must play an active role in reaching task solutions.

On the basis of the current author's research using communicative tasks as language elicitation instruments for analysis of interaction in the EFL classroom (Fotos and Ellis, 1991; Fotos, 1993a, 1993b, 1994), it is suggested that it might be more useful pedagogically to expand this list of common features. In most language tasks: (1) there is an activity; (2) there is a problem which must be solved (the goal); (3) there is negotiation of interaction (a term which will be explained more fully below); (4) there is meaning-focused language use; and (5) data are processed and acted upon.

TASK CLASSIFICATION SYSTEMS

When discussing task features or characteristics, it is again necessary to consider tasks from both research and pedagogic perspectives. Crookes (1986) reviewed the characteristics of tasks used in research, noting that information transfer was the key to understanding the nature of interaction during task performance. He distinguished between 'one-way' and 'two-way' transfer of information, depending on how many participants held necessary information. He also noted that tasks could be convergent, meaning that a mutually acceptable view was agreed upon among the participants, or divergent, meaning that different views were possible.

A more elaborate classification system was developed by Pica and her associates (1989), this also based on the requirement for information transfer and the type of task solution. Tasks were classified depending on: (1) who holds and who conveys information; (2) who requests and who gives feedback on information; (3) the direction of information flow; (4) the requirement for and precision of information conveyed; and (5) the number of possible task resolutions. Five types of communicative task were identified (Pica et al., 1993):

1. The information gap task, where one participant holds information which must be conveyed to other participants who lack information.
2. The jig saw task, which is a multi-way information gap, requiring all participants to give and receive information.
3. The problem-solving task, which is a multi-way information gap requiring the participants to agree on a single task solution.
4. The decision-making task, which is similar to the problem-solving task.
5. Opinion exchange, which requires information exchange but often does not require a solution to be reached by the participants.

Considering task features from the position of a teacher trainer and curriculum developer, Nunan (1989) preferred to classify tasks according to their communicative function. He distinguished two types of task (a division also followed by Long and Crookes in their 1992 paper). 'Real world' tasks were those activities that a learner should practice to acquire the linguistic skills necessary for daily life, such as filling out a form, ordering in a restaurant or making a telephone call. In contrast, 'Pedagogic' tasks were derived from psycholinguistic theories about SLL and their performance was believed to enhance the acquisition process, even though the task content had no direct application to common language functions. Nunan observed that the task types were usually sequenced, both linguistically and on the basis of subject content, into some sort of task syllabus.

THEORETICAL ASSUMPTIONS SUPPORTING THE USE OF TASKS

Lagging considerably behind developments in the field of general education, it wasn't until the early 1980s that SLL researchers began to turn to direct observation of the language classroom and began to study classroom discourse, at first for purposes of methodological comparison, then later for teacher training, and currently for investigation into the process of language acquisition. There are two theoretical assumptions currently motivating most SLL research (Ellis, 1990; Skehan, 1996):

- (1) Interaction is fundamental to language acquisition.
- (2) Both learner comprehension and production are necessary for acquisition to take place.

These assumptions are partly based on the theoretical position which distinguishes between language learning –a conscious process of learning rules about a language– and language acquisition –an unconscious process, similar to how children learn their first language, which occurs when learners are focused on meaning (Krashen, 1985). Exposure to communicative language is considered to be more important for learner success than formal instruction. The results of a number of studies (reviewed in Pica, 1987) demonstrate the usefulness of meaning-focused discourse in providing opportunities for learners to improve their comprehension of the target language. A subset of such discourse has been termed ‘negotiated interaction’ (Long, 1981). This term refers to conversations where individuals attempt to understand each other’s meaning by asking and answering questions for comprehension and clarification when something has not been understood, and requesting confirmation of understanding after information has been exchanged.

Learner production of the target language has also been suggested (Hatch, 1978; Swain, 1985) to be critical to the acquisition process. Termed ‘comprehensible output’ (Kowal and Swain, 1994; Swain, 1985) and defined as learner output which has been modified upon request from interlocutors, learner production has been examined by Pica and her co-workers (1987; 1989; 1991). Their research suggests that, as a result of negotiated interaction, learners are forced to modify their output in order to be understood, thereby producing more comprehensible utterances and in the process, ‘pushing’ their interlanguage towards more target-like forms.

Thus, through situations of meaning-focused interaction, learners can hear new input, request that it be adjusted to their comprehension needs, can gain feedback on their own comprehensibility, and can improve the accuracy of their own output. Within the language classroom, such situations are best provided through performance of communicative language tasks in pair or small group participation patterns. It is not surprising, therefore, that there is an extensive body of research literature analyzing the language produced by pair and group performance of communicative tasks.

Regarding the relationship between the amount of negotiated interaction produced during task performance and the various task features, such as information exchange and the requirement for a task solution, a number of general findings have been summarized recently by Long (1989). He identified four task features which have been repeatedly shown to promote the greatest use of the target language. These are: (1) whether the task requires only *one solution*; (2) whether all participants must *agree on the solution*; (3) whether all participants are required to *exchange information*; and (4) the extent to which use of the target language is *planned*, or thought out by the participants before they start to speak.

ANALYZING TASK INTERACTION

A major problem facing both researchers studying task interaction and classroom teachers using tasks to promote communicative language use has been how to determine whether task performance has been successful. The standard investigative procedure has been to analyze the type and amount of interaction produced by the

participants. Consequently, a 'good' task is considered to be one which produces a large amount of task talk during its performance. Task talk has usually been operationalized as counts of different types of negotiated interactions (cf. Long, 1983 and Doughty and Pica, 1986), often coupled with various measures of syntactic complexity, such as counts of words and S-nodes per c-unit (Duff, 1986) or T-unit (Brown, 1991), the average length of error-free T-units and their ratio to total T-units, and the number of words per minute.

A number of categories have been proposed to classify the discourse produced during classroom interaction. One of the most widely followed classification systems throughout the body of task research literature was developed by Long (1981; 1983) and has been used extensively by Pica and her associates (cf. Doughty and Pica, 1986, Pica et al., 1989). These researchers employ three categories of negotiation which occur when there is a breakdown in understanding: *clarification requests*, made by the listener when he has not understood what has just been said; *confirmation checks*, made by the listener when he believes he has understood but wants to be sure, and *comprehension checks*, made by the speaker to be certain that the listener has understood. Other researchers have added additional categories to these basic three, such as Duff (1986), who considered various types of questions separately. A more recent study (Rost and Ross, 1991) focused on clarification questioning strategies and recommended a proficiency related continuum of question types. Other studies (such as Brown, 1991) have used many discourse categories to cover multiple speech acts.

An interesting refinement of the three basic categories of negotiations emerged from research conducted in a content-based ESL classroom (Rulon and McCreary, 1986). This study indicated the importance of negotiations of content, rather than meaning, for learners in academic settings. Here, the syntactic meaning of utterances was clear to the learners but the propositional meaning was not understood. Thus, some negotiations arose through the listener's inability to process the form in which an utterance was made, while other negotiations were based on the listener's inability to understand the meaning of the content used in an utterance. These researchers noted that in academic settings language tasks are often content-based and are integrated into regular lessons. Therefore, negotiations of content, especially clarification requests, were suggested to be more numerous than negotiations of meaning during performance of academically contextualized tasks.

THE STUDY

GRAMMAR TASKS, COMMUNICATIVE TASKS AND NEGOTIATED INTERACTION

A task-based approach to grammar instruction has been recently proposed (Fotos and Ellis 1991; Fotos, 1993; 1994) using a task type which provides language learners with grammar problems which they must solve interactively. Called a grammar consciousness-raising task, the new task is similar to regular communicative activities, but has a grammar problem as the task content. Although the task participants focus on the form of the grammar structure, they also engage in meaning-focused use of the target language. In a pilot study (Fotos and Ellis, 1991) demonstrating that performance of a grammar consciousness-raising task on indirect object placement by college EFL learners promoted proficiency gains in the grammar structure com-

parable to those achieved by a teacher fronted grammar lesson, the multi-way information gap grammar task was also found to yield negotiation counts comparable to that reported in the literature for a similar type of communicative task (Doughty and Pica, 1986). One important question raised by the pilot study was whether performance of different types of grammar tasks, having various grammar problems as task content, would produce amounts of negotiated interaction similar to the amounts produced by communicative tasks matched to the grammar tasks in terms of task features (Long, 1989) and format but lacking grammatical content.

To answer this question, a large follow-up study was conducted. Three grammar consciousness-raising tasks based on word order were compared with matched grammar lessons to investigate whether task performance promoted proficiency gains in university EFL learners similar to the gains achieved through a formal grammar lesson. The grammar tasks were also compared with three matched communicative tasks to investigate negotiated interaction. Although the communicative tasks lacked a focus on grammar, their content was scholarly, involving study of aspects of the English language.

The results of the large study, presented in full elsewhere (Fotos, 1993; 1994), indicated that grammar task performance produced proficiency gains in the grammar structures similar to the gains resulting from the grammar lessons, and counts of negotiated interactions comparable to those produced by performance of the communicative tasks. The investigation reported below is based on a data subset from this large study and examines differences in the frequencies of the types of negotiation produced by the two task treatment groups resulting from changes in task features.

RESEARCH QUESTION

The following research question was investigated: How do changes in task features effect the frequencies of English language (hereafter referred to as 'L2') negotiations of interaction produced by the two task treatment groups in the three functional categories of clarification requests, confirmation checks and comprehension checks?

METHODS

SUBJECTS AND RESEARCH DESIGN

The subjects of this research were 106 Japanese college EFL learners making up two intact classes of first year non-English majors at a large private university in Tokyo. There were 53 learners per class, mostly male, and learner assignment into classes was random. The learners had one required 90-minute period per week of Oral English with a native speaker instructor who, in this case, was also the researcher. One class performed three grammar consciousness-raising tasks and the other class performed three communicative tasks matched to the grammar tasks in terms of length, format, instructions and task features, but lacking grammatical task content. Assignment into four-member discussion groups for each task treatment was random and resulted in 10-11 grammar task discussion groups and 10-12 communicative task discussion groups per task performance, depending on student absences. Before the

research began, all classes, including a third class who received grammar lessons, were administered a cloze test previously determined to be reliable and valid (Fotos, 1991) in order to investigate whether there were initial differences in integrative English language proficiency. A one-way ANOVA was performed and did not indicate a significant difference among the cloze test score means ($F_{\text{crit } df2, 146; p < .05} = 3.06$; $F_{\text{obs}} = 2.69$).

Full details of the research design and the rationale for and development of the grammar tasks, the matched communicative tasks, and the proficiency tests are presented elsewhere (Fotos, 1994). The following is a brief summary of the general research design. The tasks were administered in three-week cycles and were performed and audiorecorded by the various discussion groups in separate empty classrooms without supervision by the teacher/researcher. The grammar task group took pre-tests on all grammar structures prior to task performance, post-tests immediately afterwards and final tests two weeks later. The communicative task group did not participate in the testing regime. During the first cycle, the grammar task group performed a task on adverb placement and the communicative task group performed a task analyzing how to express emotions in English. The tasks lacked an information gap but required planned language and a single, agreed-upon task solution. The second and third week of all cycles were spent on other activities investigating whether the target structures were noticed in subsequent communicative input. These results are reported and discussed elsewhere (Fotos, 1993). The second cycle began with performance of the grammar task on indirect object placement which had been used previously in the pilot study (Fotos and Ellis, 1991). It was a multi-way information gap task, requiring an agreed-upon task solution but lacking planned language. The communicative task group performed a task on the history of the English language. The third and final cycle began with performance of the grammar task on relative clause usage and performance of the communicative task on solving problems of intercultural communication. These tasks were also multi-way information gap tasks, requiring planned language, but did not require a task solution. The chart below summarizes the distribution of task features used in the three tasks:

Chart 1: Summary of Task Features Used in the Three Tasks

	Information Gap	Planned Language	Single, Agreed-Upon Task Solution
Task 1 (Adverb)	no	yes	yes
Task 2 (Indirect Object)	yes	no	yes
Task 3 (Relative Clause)	yes	yes	no

CODING AND ANALYSIS OF THE DATA

All task performances by the different discussion groups were timed and transcribed in full. Both Japanese (L1) and English (L2) language negotiations were counted but only the L2 negotiations were coded into negotiation categories. Following the procedures used in the pilot study (Fotos and Ellis, 1991), negotiations were considered to be meaningful utterances or c-units (Duff, 1986) of inquiry about previously supplied information, and consisted of the three categories suggested by Long

(1983) and Doughty and Pica (1986), plus the two additional categories which were used previously in the pilot study, questions and repetitions:

1. Clarification Requests: made by the listener when he hasn't understood.

Example: *Please teach me rule*

2. Confirmation Checks: made by the listener when he thinks he has understood but wants to be sure.

Example: *First answer is correct, yes?*

3. Comprehension Checks: made by the speaker to make certain that the listeners have understood.

Example: *Both is correct. You understand?*

4. Questions regarding correctness or incorrectness of task card sentences.

Example: *Which sentence correct, do you think?*

5. Repetitions and requests for repetitions.

Example: *Say once more*

Repetitions were coded twice: once within the category of repetition and then again according to their discourse function within the negotiated interaction. Interrater reliability was established by sampling every tenth negotiation from the total transcription corpus of 1036 English language negotiations. A second trained researcher coded these negotiations independently. Inter-rater agreement was 89%.

Following the procedures of Duff (1986), an additional measure of negotiation quantity was performed by counting the total number of L2 words or meaningful word fragments in each negotiation. These figures were added to give the total number of L2 words produced by the two task groups for each task. One-way chi-square tests corrected for continuity were used to examine (1) the significance of differences between counts of L2 negotiations made by the grammar task group and the communicative task group across the three tasks, and (2) the significance of differences in the total number of L2 words per task for each treatment group across the three tasks. All chi-square values for Tables 1-5 are given in the Appendix. As summary statistics, the average number of words per L2 negotiation and the average number of L2 negotiations per minute were calculated for each treatment group across the three tasks. The alpha level was set at .05, $p < .05$.

RESULTS AND DISCUSSION

TOTAL NEGOTIATION COUNTS

Table 1 summarizes the negotiation counts for the grammar task group (GmT) and the communicative task group (CT) for the three tasks. The negotiation counts were quite similar for Tasks 1 and 3, but the communicative task group's counts were significantly higher for Task 2. This was because the communicative task used sev-

eral words that the students did not know or expect within the context. Negotiation Examples 1 and 3 were both taken from this task, and it is clear that the difficult or unexpected words generated many extra negotiations. However, when these extra negotiations were removed (see the next section), the significant difference between the two groups disappeared. It should also be noted that even though the total negotiation counts were higher for Communicative Task 2, the total number of words produced by the grammar task group performing Task 2 (the indirect object task) was significantly greater than the number of words produced by the communicative task group. Regarding the summary statistics, in those cases where the grammar task group made longer negotiations than the communicative task group, the number of their negotiations per minute was correspondingly smaller. Thus, there was no significant difference according to the nature of the task content, except for the special case of Communicative Task 2.

Table 1: Negotiations, Total L2 Words, L2 Words/Negotiation and L2 Negotiations/Minute

Task 1 Group	Total Neg.	L2 Neg.	Total L2Words*	Words/Neg.	Neg./Min.
GmT	134	83	260	3.13	9.69
CT	139	108	206	1.91	11.68
Task 2 Group	Total Neg.*	L2 Neg.*	Total L2 Words*	Words/Neg.	Neg./Min.
GmT	349	297	907	3.09	12.53
CT	421	374	815	2.18	18.66
Task 3 Group	Total Neg.	L2 Neg.	Total L2 Words	Words/Neg.	Neg./Min.
GmT	145	86	254	2.95	9.45
CT	121	86	258	3.00	10.58

*Between-group differences significant at $p < .05$

Table adapted from Fotos, 1994.

Task performance times were also similar between the two task groups. The first task took 8 minutes for the grammar task group and minutes for the communicative task group. The second task took 23 minutes for the grammar task group and 20 minutes for the communicative task group. The third task took 9 minutes for the grammar task group and 8 minutes for the communicative task group. Although the times for performance of the first and third tasks were quite similar, the second task took over twice as long to perform for both of the treatment groups.

In summary, it can be suggested that, regardless of whether the task content was a grammar problem or a communicative intercultural, historical or humanistic problem, the length of task performance, the number of negotiations, the number of words per negotiation and the number of negotiations per minute were all quite similar. Therefore, task content did not appear to influence the number of negotiations or the length of performance times. However, the situation is quite different when the different negotiation categories are examined for each task.

VARIATION IN NEGOTIATIONS AS A RESULT OF DIFFERENT COMBINATIONS OF TASK FEATURES

Repetitions

As shown in Table 2, Tasks 1 and 2, which were the two tasks with the requirement for a single, agreed-upon task solution, produced significantly more repetitions than Task 3, even though this was an information gap task. For repetition counts, the results may be summarized as: Task 2 > than Task 1 > Task 3, with all differences significant.

Table 2: Repetition Frequencies

Group	Task 1	Task 2*	Task 3
Gmt	17	21	9
CT	19	64	11
Total	36	85	20

*Between-group differences significant at $p < .05$

Task 2 produced the most repetitions for both communicative and grammar task groups, with significantly more repetitions made by the communicative task group. The following example, taken from communicative Task 2 on the origin of the alphabet, illustrates the repetitions which were made by this group in response to the presence of unfamiliar or unexpected words:

- (1) A: (read from task card)
"The capital letter Q was once the symbol for a monkey".
 B: *monkey?*
 A: *monkey*
 B: *monkey really?*
 A: *it's animal monkey/ok?*

Repetitions also served as a special type of clarification request signaling that the listener thought that the speaker had made a mistake and asking for a repair of the incorrect utterance. These types of repetitions were almost always followed by an appropriate repair, as shown below:

- (2) A: *verb is in front of object*
 B: *object?*
 A: *oh no/I mistake/indirect object*

As mentioned in the Methods section, repetitions were also coded according to their negotiation function and these counts were included in the categories of confirmation checks and clarification requests.

Confirmation Checks and Clarification Requests

Tables 3 and 4 show the respective counts for long confirmation checks (over one word in length) and short (one word/word-fragment in length) or ambiguous clarification requests and confirmation checks combined, together with repetitions. As a review of the difference between these two negotiation categories, the following examples should be considered:

Confirmation Check (information is known by the speaker)

- (3) A: *Now give general rules for adverbs*
 B: *adverbs may occur in front/yes?*
 A: *ok ok*

Here speaker B holds information but wants confirmation that his information is correct.

Clarification Request (information is sought by the speaker)

- (4) A: (read two sentences from task card)
which do you think correct sentence?
 B: *i can't understand/teach me*
 A: *both is correct*

In this case, it is very clear that speaker B does not hold information and wants clarification in the form of new information from speaker A.

At this point, it is necessary to explain why the counts for clarification requests and confirmation checks are presented in two separate tables. A coding difficulty exists for these two types of negotiations, not only for the present study, but for all research dealing with interaction analysis. In order to distinguish between a confirmation check and a clarification request, it was necessary to use the distinction of having or not having information, as shown above. Whereas most of the time this procedure was adequate, there were difficulties when the negotiations were short, such as '*what?*' or were ambiguous requests to repeat information, such as '*say again please*'. In these cases it was impossible to tell if the speaker did not understand the preceding speaker's utterance, in which case the negotiation would be a clarification request, or else, simply wanted the utterance repeated to see if he had understood it correctly, in which case the negotiation would be a confirmation check. To solve this problem, the short and ambiguous negotiations were separated from longer and unambiguous negotiations and were coded into a combination category within their own table (Table 4), with one exception –when the negotiation was followed by a repair (see Example 2, Repetitions). In this case the listener was able to tell that the speaker was making a clarification request for a repair, so he replied by making a repair.

The separate coding procedure conveniently removed most of the lexically-related extra negotiations from the negotiation counts of Communicative Task 2, making it possible to compare the grammar task with the communicative task for longer confirmation checks and clarification requests, as shown in Table 3 below.

Table 3: Long Confirmation Checks and Clarification Requests

Group	Task 1		Task 2		Task 3	
	Conf. Cks	Clr. Rq.*	Conf. Cks	Clr. Rq.*	Conf. Cks	Clr. Rq.*
GmT	42	15	111	80	34	10
CT	42	31	86	37	27	27
Total	84	37	197	117	61	37

*Between-group differences significant at $p < .05$

Through removal of short requests and repetitions from the counts for Task 2, the significant differences between the grammar task group and the communicative task group were lost for confirmation checks and moved in favor of the grammar task group for longer clarification requests, although the communicative task group made significantly more clarification requests for Task 1 and Task 3. It is interesting to consider the suggestion of researchers such as Pica (1987) and Rulon and McCreary (1986) regarding the role of clarification requests in improving the quality of learner output. To answer clarification requests, speakers must reframe old information or generate new information. Such linguistic demands force the speakers to improve the accuracy of their output, 'pushing' their language further in the direction of the target language. Therefore, it is useful to identify combinations of task features which promote this important negotiation type.

Inspection of Table 4 suggests that the many extra negotiations in Communicative Task 2 (see Table 1) came from short or ambiguous utterances. However, Grammar Task 2, which did not have unusual words, also had significantly more short confirmation checks and clarification requests than Grammar Tasks 1 and 3.

Table 4 : Repetitions and Short Confirmation Checks/Clarification Requests

Group	Task 1	Task 2	Task 3
GmT	15	61	20
CT	20	114	10
Total	35	175	30

*Between-group differences significant at $p < .05$

In terms of the total differences among the tasks, Task 2 promoted the most confirmation checks and clarification requests, both long and short, followed by Task 1, which was not an information gap task but required a task solution. Task 3, which was an information gap task but did not require a solution, had the fewest negotiations in these two categories. However, between-task differences were significant only for Task 2.

Comprehension Checks

Comprehension checks are negotiations made by the speaker to make sure that the listeners have understood. Example 4 shows a negotiation from Communicative Task 2 dealing with the word 'hieroglyphics'. Speaker A makes the comprehension check after each reading of his task card sentence.

- (4) A: (Speaker read from task card)
"This system was called hieroglyphics".
 B: *oh no/slow slow*
 A: (read sentence a second time) *you understand?*
 C: *this word is difficult/once more*
 A: (read sentence a third time) *ok?*
 B: *oh/(laughs)/I can't understand*
 A. (read sentence a fourth time) *ok ok?*

From inspection of this example, it is clear why Communicative Task 2 had so many comprehension checks. However, it should be noted that Grammar Task 2 also had many comprehension checks. In fact, the between-task differences were all significant for both the grammar task group and the communicative task group, with the two information gap tasks having many more comprehension checks than Task 1, which was not an information gap.

Table 5: Comprehension Checks

Group	Task 1	Task 2*	Task 3*
GmT	11	41	22
CT	15	137	22
Total	26	178	44

*Between group differences significant at $p < .05$

THE NUMBER OF WORDS PER NEGOTIATION

Up to now the issue of negotiation quality has not been addressed. One reason for this is that operationalizing quality in limited discourse is extremely difficult. As mentioned in the introduction, quality is usually measured by syntactic complexity, this often expressed as how many of some type of small unit are found within some other type of larger unit. For example, T-units are a very common unit of production analysis. A T-unit is defined as a main clause plus whatever subordinate clauses are attached to it or embedded in it. 'Ann saw Tom' is a T-unit and 'Ann, who is my classmate, saw Tom' consists of two T-units. Many interaction studies in the research literature measure S-nodes per T-unit, where an S-node is defined as a tensed or untensed verb within the unit of analysis (see Duff, 1986).

This may be an adequate procedure for analysis of writing, but for discourse analysis, especially when the subjects are of lower proficiency levels, there is a major difficulty. Both T-units and S-nodes are based on the presence of verbs, yet many of the negotiations in this report do not contain verbs. Consequently, according to stand-

ard procedures, quality cannot be determined from the data presented here. However, one measure might indicate quality: the number of words per negotiation. It is interesting that the 1991 pilot study, which used the second grammar task, had an average number of words per negotiation of only a little over one. But in the present study the average ranged from about two to three words per negotiation, across all tasks and for both communicative and grammar task groups. Such a lack of variation raises the possibility that negotiations in general may have a characteristic length because of their discourse function. In any case, it is necessary to think carefully about what constitutes quality in grammatically limited discourse and develop more sensitive units of analysis.

DO VARIATIONS IN TASK FEATURES AFFECT LEARNER OUTPUT?

The research question of this report can now be addressed and answered affirmatively. Varying the combinations of task features appeared to promote negotiation types differentially. Comparing the two task treatment groups, the first task, which lacked an information gap, and the third task, which lacked a single, agreed-upon task solution, were quite similar in terms of the length of time required for task performance and the number and type of negotiations produced. The second task, which was a multi-way information gap with a single, agreed-upon task solution, took over twice as long to perform as the first and third tasks, produced over three times as many total negotiations, and significantly promoted the greatest number of all types of negotiation. The two information gap tasks, Task 2 and Task 3, significantly promoted the most comprehension checks, whereas Task 1, which required a task solution but was not an information gap task, elicited significantly more longer clarification requests/confirmations checks than Task 3, which did not require a task solution.

CONCLUSIONS

Any conclusion offered at this point must be tentative and exploratory. Because of the lack of correspondence among analytical units, coding procedures, and discourse categories across the field of classroom interaction analysis, it is difficult to compare research findings to see if other studies confirm the results presented here. Therefore, considerations about task structure determining the nature of discourse have to be verified through comparison with other research, through triangulation of research methods, and through a series of replication studies which follow a standard methodology.

With these caveats in place, the conclusions of this report may be summarized as follows:

1. There was no significant difference between negotiation counts according to the nature of the task content, with the single exception of the inflation of Communicative Task 2's negotiation counts due to learner response to unusual lexical items.
2. Manipulation of task features significantly promoted different types of negotiations. The most negotiations of all types were produced by the two tasks which were multi-way information gaps with a requirement for a single, agreed-upon task solution. Clarification requests, suggested to be of special value in developing learner output, were promoted most by tasks which required a single, agreed-upon solution.

3. The presence of unknown or unexpected words significantly promoted negotiations.

The next step for both research protocols and classroom task pedagogy is the development of a range of interactive tasks characterized by different combinations of task features designed to address the particular discourse needs of diverse language learners.

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APPENDIX**CHI SQUARE STATISTICS FOR NEGOTIATION FREQUENCIES**

Table A-1: Chi Square Statistics for Table 1, Differences in Negotiation Frequencies –Grammar Task Group Versus Communicative Task Group

Type of Negotiation	Task 1	Task 2	Task 3
Total Negotiations	.0586	6.547*	1.9887
English Language (L2)	3.0157	9.595*	0
Total Number of L2 Words	6.2789*	4.8089*	.0176

*Significant at $p < .05$, $X^2_{crit, 1 df, 3.84}$

Table A-2: Chi Square Statistics for Table 1, Differences in Negotiation Frequency Totals Between Each Set of Tasks

Negotiation Category	Task 1 and 2	Task 2 and 3	Task 1 and 3
Total Negotiations	235.8734*	243.7322*	.0667
English Language (L2)	204.2721*	268.5825*	.0739
Total Number of Words	722.3021*	656.6580	2.070

*Significant at $p < .05$, $X^2_{crit, 1 df, 3.84}$

Table A-3: Chi Square Statistics for Differences in Types of Negotiation Frequencies, Grammar Task Group and Communicative Task Group, For All Tasks (Tables 2-5)

Type of Negotiation	Task 1	Task 2	Task 3
Confirmation Checks	.1143	20.7529*	.05
Confirmation Checks	0	2.9239	.59
Clarification Requests	4.8913*	15.0769*	6.9189*
Reps. and Short Conf/Clarif.	1.1	15.4514*	2.7
Comprehension Checks	.1250	50.7022*	0

*Significant at $p < .05$, $X^2_{crit, 1 df, 3.84}$