

Do second language learners need negotiation?¹

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Does second language (L2) learners' participation in negotiation with native speakers (NSs) meet their needs for data on L2 lexical and structural features? This question was addressed through an analysis of NS utterances of negotiation which were produced as twenty native speaker-non-native speaker (NS-NNS) dyads carried out four communication tasks in English. The analysis revealed that the NS utterances of negotiation offered data on L2 forms, the meanings they encoded, and some of the structural relationships into which they could enter. Negotiation thereby served the NNSs in ways that supplemented its two most widely acknowledged contributions to the L2 acquisition process, i.e., NNS comprehension of L2 input and modification of interlanguage output. However, the analysis also revealed that the NS utterances of negotiation contained few explicit cues which could help the NNSs distinguish between lexical and structural features of their interlanguage that were target-like and those which were not. Thus negotiation appeared to address NNS needs for data on features that were part of the L2, but offered no explicit information on which of their own interlanguage features did not belong to the L2.

Theoretical and Research Background

Do second language (L2) learners need negotiation? Judging from the considerable amount of attention which has been given to the study of negotiation, the answer to this question would seem to be "yes." Numerous papers have focused on identifying and describing negotiation and its aliases such as interactional modification and conversational adjustment (See, for example, Doughty and Pica, 1986; Duff, 1986; Ellis, 1985; Gass and Varonis, 1985; Long, 1980, 1983; Pica, Holliday, Lewis, and Morgenthaler, 1989; Pica, Young, and Doughty, 1987; Porter, 1986; Rulon and McCreary, 1986; and Varonis and Gass, 1985a, b). Throughout this work, negotiation has been viewed as an activity through which L2 learners and interlocutors work together linguistically to repair or resolve impasses in communication and reach mutual comprehension of message meaning. Their participation in negotiation has been shown to give learners opportunities to comprehend L2 input and to modify production of their interlanguage forms and

structures, which are two experiences widely regarded to be critical to successful L2 learning. (For theoretical work on input comprehension and modified production, see Krashen 1985 and Swain 1985, respectively).

One of the most characteristic features of negotiation is that it alters the structure of interaction between two or more interlocutors as they engage in social discourse. This takes place as one interlocutor lets the other know that something is not clear or has not been understood. Excerpts (1) and (2), from Pica et al (1989), and Excerpt (3), from Pica (in press a, b), were taken from communication tasks which required the replication of a picture by one interlocutor based on directions from the other. As shown in these excerpts, an utterance such as *what?* or *you mean the trees have branches?* or *underneath? under under? another word?* can serve as a negotiation signal which in turn interrupts the flow of interaction. The interlocutors then work out this impasse linguistically. Their work can take many forms. It can be as brief as the native speaker - non-native speaker (NS - NNS) exchanges in Excerpts (1) and (2) below. In these excerpts, the signal receiver repeated, rephrased, and/or defined a word from a previous utterance or provided a simple acknowledgement such as *yes*. The work of negotiation can also be considerably more extensive, with numerous signals and responses, as shown in Gass and Varonis (1985), Pica (1987), and Varonis and Gass (1985a, b). Among other options, interlocutors can also abandon their negotiation and switch to a new topic or close off their communication altogether.

- | | NNS | NS |
|-----|--------------------------|---|
| (1) | | ... is your drawing very neat? |
| | what? | neat, I mean all the lines come together, it's orderly |
| | no | |
| (2) | and tree with stick | you mean the trees have branches? |
| | yes | |
| (3) | | ... put the mushroom underneath the other mushrooms underneath the mushrooms ok? got it? all right anybody who can ask a question, have a question? |
| | underneath? under under? | |

another word?

underneath the mushrooms that are
already there underneath is one word
it means under

oh oh

Research on negotiation has been grounded in the theoretical perspective that comprehension of unfamiliar L2 input and modification of interlanguage output are what are needed if learners are to move beyond their current developmental level. As the excerpts (1) - (3) suggest, and as the earlier cited research has revealed, learners' participation in negotiation provides them with opportunities to address such L2 learning needs. However, what research has also revealed is that it is not always the case that such opportunities are taken by the learner, or if taken, lead to successful comprehension or modified production.

Thus, as Hawkins (1985) has shown in her research on NS-NNS negotiation, L2 learners who often misunderstand the meaning of the negotiation moves and queries of their interlocutors or who are unable to understand them at all nevertheless manage to sustain the negotiation with utterances that are topic -appropriate and relevant to the negotiation. Further, as Brock, Crookes, Day, and Long (1986) and Schmidt and Frota (1986) have found, learners appear to make little use of interlocutor signals during negotiation as a basis on which to modify their interlanguage. This can be seen below in (4), from Brock et al (1986: 235). Here the NNS was given a NS version of the verb *do*, modified from its base form of *do* in the NNS initial question into the more target-like past form of *did* in the NS follow-up question; yet in responding to the NS, the NNS returned to the original form and did not use the more target-like version: *Yeah how do you like it?*

- | | | |
|-----|---------------------------------|--------------------|
| (4) | NNS | NS |
| | Uh how- how do you feel Taiwan? | How did I like it? |
| | Yeah how do you like it? | |

These findings represent a smaller but important body of work which has questioned the efficacy of negotiation in assisting learners' comprehension and production and indeed challenged the scope of its sufficiency and importance to the L2 learning process. (See, in addition, Aston, 1986 and Sato, 1986). This work has dampened, though by no means obliterated, the potential contributions that

negotiation can make to L2 learning. What it has suggested, however, is that negotiation provides conditions which assist learners' comprehension and push them to modify their interlanguage production, but does not necessarily guarantee that they will accomplish these goals successfully. Fortunately, recent research aiming to distinguish between variables which enhance conditions for successful negotiation from those which inhibit such conditions has already provided some of the needed specificity in this area. This can be seen, for example, in studies on variables such as the gender pairing of learners and their interlocutors (Gass and Varonis, 1986; Pica, Holliday, Lewis, Berducci, and Newman, in press), the types of tasks in which they engage (Pica, Holliday, Lewis, and Morgenthaler, 1989), and their roles and relationships as interactants (Pica, in press a, b; Pica, Young and Doughty, 1987).

Just as recent empirical work on negotiation has both raised and responded to concerns regarding the extent to which negotiation fulfills learners' needs to comprehend L2 input and modify their interlanguage output, a great deal of theoretical work has brought about new ways of analyzing, defining, and refining learners' needs beyond these two comprehension and production processes. This newer theoretical perspective on L2 learning has provided in turn a basis on which to re-assess the role that negotiation might play in assisting the needs of L2 learners. Thus, to address the question in the title of this paper, "Do Second Language Learners Need Negotiation?" requires first an update of second language acquisition (SLA) theory on what it is that learners are believed to need for their L2 learning and secondly, a re-examination of negotiation data to determine whether and if so, how negotiation might meet these needs. Both the theoretical review and analysis of negotiation data are therefore presented below.

What do language learners need in order to learn an L2?

This question has been addressed from a variety of perspectives with respect to both second language pedagogy and research. Analyzing learners' needs has been a principal thrust of specific purpose language teaching. Within this field, determining "needs" has meant finding out what learners are expected to do with the L2 in professional, academic, and other targeted sociocultural contexts and designing their curriculum and classroom experiences accordingly. As noted above, SLA theory and research have made reference to learners' needs through such constructs as "comprehensible input" (Krashen, 1985), "modified interaction," (Long, 1985), and "comprehensible output" (Swain, 1985). Constructs such as these have suggested

that what learners need is related to the linguistic context of their language learning and their opportunities for L2 use therein.

Current books on SLA theory such as those of Birdsong (1989), Cook (1988), and White (1989), chapters in edited collections, particularly those in Gass and Schachter (1989), and articles throughout the major research journals, for example, Lightbown and Spada (1990) and White (1987, 1988) have brought further attention and a sharper focus to the "what" of questions regarding learners' needs. Based on work of this kind, the answer to the question of what learners need appears to lie, in part at least, in "linguistic data," more specifically, two kinds of data. Learners need data on what is in the L2 and on what is not in the L2.

The "what" of the data -- as well as the "what to do" with the data -- have been the subject of considerable theoretical debate. The debate over the "what to do" with the data has been dependent on the theory of language learning that can be used to describe, analyze, and understand the learning process, for example, language learning as parameter setting and re-setting, as hypothesis testing, as problem solving, as any number of linguistic, cognitive, and/or psycholinguistic processes. Obviously, there are constraints on language and language learning that both help and hamper learners' L2 development. There are language specific and language universal restrictions -- on clause movement, for example. There are also learner-internal restrictions such as those on the mental capacity through which learners make use of L2 data and on their cognitive processes of attention, perception, and problem solving. However broadly or narrowly these various constraints and capacities are defined, and however strongly or weakly claims are made about their role in second language learning, they are generally accepted as fundamental to the learning process.

Much of the debate over the "what" of the data is related to questions of what theory of language should be used to describe and analyze the linguistic characteristics of L2 input and interlanguage systems, for example, as structures and rules, forms and functions, principles and parameters, etc. (For an excellent discussion of this topic, see Gregg 1989). Further, despite consensus that learners need data on what is *in* the L2, i.e., "positive L2 evidence," there has been considerable debate over whether learners need data about what is not in the L2, i.e., "negative L2 evidence." Unfortunately, a good deal of this discussion has been clouded and narrowed by issues related to correction of learner error, and has ignored other resources for negative evidence such as explicit instruction, metalinguistic input, and, as will be discussed below, interlocutor signals to the learner about lack of message clarity and

comprehensibility. (See Schachter, 1983, 1984, 1986 and White, 1989 for elaboration of these issues).

In light of -- or in spite of-- the debate over the "what" of the linguistic data that learners require, these data can be regarded in fairly general way as data which cover three linguistic areas. First, learners need data on L2 form and L2 forms, i.e., data on the segments or units of form and meaning that are in the L2 and those that are not. Learners also need data on L2 form-meaning relationships. This would include data on what L2 segments or units mean and on what they do not mean as well as data on whether two or more forms mean the same thing, almost the same thing, and not the same thing at all. Thirdly, learners need data on L2 form-structure relationships, particularly on the distribution, collocation, and movement of L2 forms, both those that are possible in the L2 and those that are not.

Where does negotiation fit in with learners' needs for data on what is and what is not in the L2, and the constraints and capacities that bear on the L2 learning process?

This question will be addressed in the following ways: through a review of relevant theory and research on SLA, within the presentation of a theoretical framework for analyzing negotiation, and in light of findings from a study which used the theoretical framework to analyze learners' negotiation with native speakers.

How might Negotiation Meet Learners' Needs for L2 data?:

How are learners believed to obtain L2 data? Claims have been made that this can be accomplished through:

- (1) contextualized L2 input, for example, samples of L2 which refer to visible objects, familiar topics, etc., as discussed in Krashen (1981, 1982, 1983, 1985).
- (2) explicit L2 instruction, timed according to learner readiness and stage of development, as shown by Pienemann (1985, 1989).
- (3) repeated L2 exposure, especially over time, as described by Krashen (1983, 1985).
- (4) comprehensible L2 input, as elaborated by Krashen (1981, 1982, 1983, 1985) and Long (1983, 1985)
- (5) comprehension of initially incomprehensible L2 input, as shown in research by Gass (1988), Long (1983, 1985), Pica, Young, and Doughty (1987).
- (6) focus on L2 form, as revealed in the work of Doughty (1988, In press), Long (1990), and Schmidt (1990), and Schmidt and Frota (1986),

These last four ways of obtaining L2 data -- through repeated exposure, comprehensible input, comprehension of input, and focus on form -- are closely linked in a number of ways, and bear some discussion as they tie in closely to what learners' participation in negotiation might offer them as a source of L2 data.

First, the label "comprehensible input" is used here to refer to the kind of input in Krashen's sense of the term as that which learners are able to comprehend in regard to meaning, but which contains L2 forms, structures, and/or rules just beyond their current interlanguage system. According to Krashen (1983), when learners understand input of this kind, they also connect subconsciously the meaning of the input and a form in the input that they have not yet acquired. In order for learners to internalize this new form, either adding it to their interlanguage or using it to restructure their current system, two additional conditions must be met. First learners must notice a difference between the new form and whatever forms are in their current level of competence. Then they must have an opportunity or perhaps a number of opportunities to recognize and confirm the form. Thus, a new form must become available and noticed again -- and possibly again and again -- in comprehensible input in order for its acquisition to occur.

Krashen (1983, 1985) displays a broad perspective on what meaning and form represent in this view of input. As such, when learners make connections between input meaning and form, such connections can be shown in a variety of ways. For example, learners might come to understand a new L2 lexical item. They might perceive an association of meaning between a new form and an already acquired lexical item. They might recognize that an irregular form in the L2 has the same meaning as, and therefore can replace a previously regularized, but non-target-like version in their interlanguage. Thus, comprehensible input can offer learners data on new L2 forms as well as on relationships among forms and their meaning.

Although repeated exposure and comprehensible input appear to be closely linked in terms of assisting learners' needs for L2 data, research has yet to uncover, and indeed has barely explored, the extent and intensity of each exposure and the amount of distance between exposures that are necessary for the learner to convert L2 exposure into useful L2 data. It is possible that the repeated exposure to a new form that can occur in a single negotiation may be sufficient. Such repeated exposure may be seen in the repetition of *neat* in Excerpt (1) above, and in the many times in which *underneath* was repeated along with its meaning in Excerpt (3). In addition to the repeated exposure to the word *underneath*, the learner was told that it meant the same thing as *under*, thus possibly confirming his own views on its meaning, and

thereby enabling him to recognize the relationship between the meanings of *under* and *underneath*.

Swain (1985), citing work from child language development, posits another way in which comprehensible input may provide learners with L2 data, particularly with respect to form - meaning and form -structure relationships. She argues that learners' understanding of meaning frees up their attention so that they can induce L2 forms, structures, and rules just beyond their current interlanguage system.

The strength of Swain's argument has been reduced somewhat by recent work of Van Patten (1990). His research on adult learners of Spanish revealed that their understanding of input meaning was not accompanied by their successful focus on form. Since his subjects were given L2 input by listening to a passage four times in succession as they performed specific tasks, his findings do not speak well for the possibility that acquisition is aided through repeated exposure to a new form when it is encoded in comprehensible input.

Despite the findings of Van Patten, however, it is still possible that repeated exposure to comprehensible input over a longer period of time, and within a more interactive context than a listening task, might allow for the process of L2 data induction to which Swain refers. Thus it is possible, with reference to Excerpt (2) above, that the opportunity to confirm the NS interpretation of *tree with stick* as the *trees have branches* freed the learner to notice that article *the* and plural *-s* had been added to the NS production of *the trees*.

The possibility that recognition of L2 form from comprehensible input depends on the length and conditions of exposure to the input is certainly suggested by Doughty's research on relative clause acquisition in English L2 (Doughty, 1988, In press). Two experimental groups of subjects were exposed to ten lessons, given over the course of ten days. They were first presented with a text in which relative clauses were abundant in the text sentences. Then they were asked comprehension questions about the text. The texts were presented sentence by sentence on a computer screen. The two experimental groups could request help for their understanding individual sentences; this would appear on the computer screen at their request.

For one experimental group of Doughty's subjects, labelled the "meaning oriented group," help was provided in the form of word definitions and repetitions as well as through the separation and rephrasing of the matrix and relative clauses. This technique gave salience to the matrix and relativizer constructions of the sentences and highlighted relationships between. In this way, the relative clauses to which the

subjects were exposed were embedded in modified input and their features were made salient, although the rules themselves were not made explicit to them. The other experimental group, known as the "rule oriented group," was presented with prescriptive and descriptive rules for relative clause formation when they asked for assistance with the text.

What Doughty found was that after the ten days of this treatment, comprehension of the text was significantly better for the meaning oriented than rule oriented subjects. Further, and more relevant to the present discussion, was that progress in the acquisition of relativization rules was equally good for subjects in both groups. Such results suggested that the repetitions and rephrasings of relative clauses and their individual features which were performed to make the text comprehensible to the subjects also played a role in subjects' acquisition of form. These results also suggested that learners can obtain data on L2 forms and structures not only through exposure to L2 input they already understand, i.e., "comprehensible input," in Krashen's sense of the term, but also when engaged in the activity of attempting to understand input that is still incomprehensible to them. How this may come about is suggested by the findings of research on what happens to input as learners come to understand it better.

Thus research by Chaudron (1983), Long (1985), and Pica, Young, and Doughty (1987) has shown that comprehension of initially unclear input is aided when topic relevant content words in the input are adjusted linguistically through repetition, rephrasing, addition of pre or post descriptors, use of examples, etc. in response to actual or anticipated requests for clarification. It could be argued that these various modifications by the NS not only provide clues to the meanings of the individual words and utterances about which the NNS has inquired, but also contain data on L2 forms and form - meaning relationships about which no requests have been made.

This might happen in the following way: The repetition or rephrasing of content words to make them more comprehensible might require that the words be extracted or segmented from the utterance in which they had initially appeared. The segmented words can then be uttered in isolation, embedded in a new phrase or even longer utterance, or re-positioned, for example, from verb object position in the initial utterance to subject position in the repeated utterance. In this way, the repetition and modification of L2 input which make it comprehensible might also help to make several of its features salient -- individual words and forms, relationships between the meaning of the input and the L2 form or forms which encode the meaning, and the structural relationships into which the L2 forms can enter.

This can be seen in Excerpt (5), from Pica (in press). Here, the NS response to the NNS question contained a repetition and elaboration of *inside*, the word about which the NNS has asked. However, the NS response also included other linguistic adjustments. The NS used *garage* in the position of subject, having extracted it from its position as object of the verb *got* in the initial utterance.

- | | | |
|-----|------------|---|
| (5) | NNS | NS |
| | inside? | it's got a garage on it, on the side of
it where you park the car inside |
| | oh yeah | you know where __ a garage is
here you park a car inside |

If input modifications such as those in (5) are abundant in NS-NNS negotiation, these modifications suggest that negotiation is a good source of positive data on L2 forms, the meanings they encode and the structural relationships into which they enter.

L2 Input as a Source of Data on What is *not* in the L2

The most direct way that learners can be given data on what is not in the L2 is to be told what should not or cannot be used in therein. However, aside from warnings about taboo L2 expressions or exposure to materials which identify learner errors in compositions and conversations, it is unlikely that learners will be told that specific forms, constructions, or expressions are not in the L2 unless they themselves have used these erroneous features in their interlanguage. Thus, an alternative and more practical way for learners to obtain data on what is not in the L2 is for them to be given correction of errors in their own interlanguage production. Using as a basis, reports of others' research, particularly that of Schmidt regarding his own L2 learning experience, Long (1990), Schmidt and Frota (1986), and Schmidt (1990) have indicated, however, learners need to be aware that a response to what they have expressed is indeed a corrected version and not just another way to encode the same meaning. Thus, learners must come to recognize not only that there is a difference between their interlanguage production of message meaning and the way that this same meaning would be encoded in the target, but also that the difference is one based on error. (See Chaudron, 1983 for a related discussion on input adjustment ambiguity in teacher speech to L2 learners.)

Further, Long (1990) and Schmidt (1990) argue that conscious attention is critical to many aspects of the learning process. Within this perspective, it is possible that not only correction, but any experience which draws learners' attention to differences between their interlanguage forms and those in their interlocutor's L2 input might be helpful in bringing salience to what is not in the L2. Often, learners' participation in negotiation appears to touch on this experience. Such a possible outcome is suggested in Excerpt (6), from Pica (1987), in which the NS interlocutor negotiated briefly with the NNS as he struggled to convey the meaning of *child psychology*.

(6)	NNS	NS
	I read psych-psychology infant infantile	
	very children	child psychology? you studied child psychology?
	yes	

Theoretical discussion of additional relevance to the question of how learners obtain data on what is not in the L2 surrounds the construct of "comprehensible" or "modified" output (Swain, 1985). Swain has suggested that learners' production of comprehensible output through their own linguistic modifications might push them to manipulate L2 forms and structures in ways that move them beyond the current level of their interlanguage. As shown Excerpt (7), also from Pica (1987), this is what learners have been observed to do when, during negotiation, they respond to NS open-ended clarification requests such as *what?* , *please repeat*, etc. Here the learner modified the non-target-like version of *month* from his original utterance to the more target-like *months* in follow up to the NS request for clarification.

(7)	NNS	NS
	I gotta go then month	huh?
	ten months	

In sum, these seven excerpts from NS-NNS negotiation have suggested that participation in negotiation offers learners access to L2 input that might serve as data

for their L2 learning. During negotiation, as interlocutors respond to learner difficulty by repeating L2 input and/or adjusting it linguistically, they highlight L2 forms and relationships of form and meaning. When NS interlocutors signal to learners, they often do so by providing a more target-like version of the learner's interlanguage. These NS signals can provide learners with a basis for comparing their interlanguage with a target-like model and can draw learners' attention to what it was they were doing with interlanguage form and structure that differed from that which other L2 users are expected to do. How representative are these seven examples of negotiation as a source of L2 data? To move beyond this small inventory of examples and to explore the possibility that negotiation can provide learners with data for L2 learning, a larger corpus of NS-NNS negotiation data was examined. The data were collected from NS-NNS dyads as they interacted on four different communication tasks. Analysis of the data was carried out within a framework which attempted to identify and describe negotiation and to illuminate and distinguish its contributions to learners' needs for L2 data.

A Study of Negotiation as a Source of L2 Data

Approach to Data Collection

The analysis of negotiation to be presented is based on NS-NNS interactional data, collected over the course of several studies, all of which have been reported in previous papers (See, for example, Pica, in press b; Pica et al, 1989; Pica et al, 1990; and Pica et al, in press). These studies have focused on the effects on negotiation of the social and cognitive variables of gender - pairing and information distribution and control. Therefore, priority in targeting subjects for this research was given to controlling for as many confounding factors as possible. This was done with full awareness that the process of controlling for some social and cognitive variables in order to study others would in turn limit the generalizability of the research findings. Discussion of these and other issues surrounding this approach to the research has appeared elsewhere (See Pica et al, 1989 and Pica et al, in press) and will be further addressed below.

Thus, in order to control for NNSs' linguistic and sociocultural backgrounds, subject selection was limited to Japanese L1 speakers born and raised in Japan. The NNSs ranged in age from 18 - 47, with the median age of approximately 23. All students were enrolled in low- intermediate level classes at the pre-academic English language institute of a large, private, urban university. They presented mean TOEFL scores of 455.4 for the Females and 455.1 for the Males.