

Repetition of NNS triggers characterized nine percent each of the NS signals. Twelve percent were not modified or repeated; the majority of these were short, open questions or remarks such as "What was that?" "Huh?" or "Sorry, I don't understand," which sought clarification of the NNS trigger.

TABLE 2a
NS Signal Utterances to NNSs*

<u>NS signal utterances to NNS trigger</u>	<u>n utterances</u>	<u>% NS signal utterances</u>
Without repetition or modifications (2a)	67	12
With repetition (2b)	49	9
With linguistic modification (2c)	442	79
Total NS signal utterances to NNSs	558	100

*For NS - NNS dyads on four information-exchange tasks.

TABLE 2b
Modification in NS Signal Utterances to NNS Trigger

<u>Modification of NNS trigger in NS signal utterances</u>	<u>n utterances</u>	<u>% NS (2c) utterances</u>
Lexical (2c1)	178	40
Morphological (2c2)	0	0
Lexical + morphological (2c1 + 2c2)	1	0
Structural:	184	42
segmentation with movement (2c3)	52	
segmentation w/o movement (2c4)	131	
segmentation with movement of some parts of NNS trigger + segmentation w/o movement of other parts (2c3 + 2c4)	1	
Lexical + morphological + structural (2c1 &/or 2c2) + (2c3 &/or 2c4)	79	18
Total NS (2c) signal utterances	442	100

The predominance of NS modified signals suggested that the NNSs might have been provided with opportunities to hear their own interlanguage given back to them and to notice differences between forms and features of their interlanguage trigger and how they might be expressed in the L2. Even if such differences could be noticed,

however, there was seldom anything explicit in the modified NS signals as to whether they might serve the NNSs as cues for self-correction. Since the context for the negotiation consisted of communication tasks and the majority of the NS signals sought clarification or confirmation of NNS message meaning rather than message form, the NNSs could easily have perceived the modified signals as simply the way the NS had chosen to encode requests to confirm the content of the NNS message. Thus, with rare exception, the NS modified signals offered the NNS few explicit clues as to whether the modifications therein represented a corrected or more target-like version of the interlanguage trigger or merely an alternative one. This was also the case for the handful of NS signals in the data that were exact repetitions of NNS production. A typical signal-response exchange, focused on message meaning, is displayed in (13). The NS signal offered a lexical modification to the NNS by supplying the word *rectangle*, which was apparently the word that the NNS himself was trying to convey to the NS, but there was no explicit comparison drawn with the NNS version. The NS signal in (14) represents a somewhat greater amount of explicitness regarding an NNS vs. target-like version of the word *crossed*, although the NS did not tell the NNS exactly what was different about the two productions. In (15), which was the only sequence of its kind in the negotiation data, the NS provided an open-ended signal which questioned the NNS production of *flower*, and then proceeded to teach the target-like pronunciation.

- | (13) NNS | NS |
|--------------------------------------|---|
| ...not real square...um hard to tell | |
| you yeah ok square but long square | a rectangle? |
| yeah | |
| (14) the windows are [krozdz] | the windows have what? |
| [krozdz] | [krawst]? I'm not sure what you're saying there |
| windows are [krozdz] | oh the windows are [klozdz] oh ok sorry |
| (15) and left tree is a [flo: wer] | is what? |
| [flo: wer] | a what? |
| a [flo: wer] [o] | yeah get the book |

flower	oh a flaUer
flower	oh a flaUer
flower oh pronunciation is very difficult __ flower	flaU:
eh? flower	um
what's [f]?	[f ... o...]
ow	you hold your tongue and go [aU]

Modifications in NS Signal Utterances

Also shown in Tables 2a and 2b, the modifications given to NNSs in NS signal utterances were lexical and structural, and in similar proportions of 40 and 42 percent respectively. More than two-thirds of the structural modifications involved segmentation. As illustrated in (16), below, these provided the NNSs with data on L2 structure as well as opportunities to hear portions of their interlanguage given back to them by the NSs.

The first NS signal segmented *on the front* from NNS *on the front is a small stone*. The second NS signal modified the NNS *on the front* to *in front* and segmented the NNS *doors*, eliminated the -s ending and moved *door* into a prepositional phrase post-postmodifier for *front*, to which the NNS was able to respond with the more target-like response, *there is a small step*.

(16)	NNS	NS
	... I think on the front is a small stone	on the front?
	yeah oh doors	in front of the door
	yeah there is a small step, yes	oh yes

The NS signals, however, provided no clues as to whether the NS *in front of the door* was the target-like way to encode the L2 form-meaning relationship of what the NNS had intended or was simply a different way to encode this (Again see Chaudron, 1983 for related views on input adjustment ambiguity in teacher speech to L2 learners). The NS negotiation signal was effective in clearing up the immediate impasse, but what was not so obvious was its long term potential for helping the NNS to distinguish between the meanings of in and on in themselves and in the various

contexts in which they can be used. Perhaps, over time, ambiguities such as these can be worked out through the NNS further participation in negotiation about in, on, and door or through other experiences in the L2. However, what this and other negotiation sequences suggested was that, if learners need to have access to both what is and what is not the L2, negotiation can be of help, but it does not fulfill all of a learner's needs in the latter area.

Eighteen percent of the NS signal utterances given to NNSs were modified both lexically and structurally. Typically, the combination of lexical and structural modification provided NNSs with a segmented part of the NS trigger utterance to which the NNS had signaled, pre- or postmodified, or followed by a paraphrase or description. Such signals thereby offered NNSs data on both how their interlanguage could be both segmented and how the resulting segments could then be modified in meaningful ways. This was illustrated in (17). Again, however, the NNS was not shown whether *traffic cross* was an acceptable way of expressing *where people can cross*, was a synonym for *traffic light*, or was simply a comprehensible way of expressing the meaning of what he had drawn in his picture.

- | | |
|---|--|
| (17) NNS | NS |
| so there's a cross in the center of the paper | what do you mean by cross? |
| traffic cross | oh where people can cross? or traffic light? |
| yes | |

Conclusions

This paper has attempted to address the question of how language learners' participation in NS-NNS negotiation might meet their needs for L2 learning, especially with regard to the amount and type of data on L2 lexical and structural features that are made available. Analysis of NS-NNS negotiation revealed that NS signals and responses of negotiation provided NNSs with a great deal of L2 lexical and structural data.

By supplying L2 data, the utterances given to NNSs by NSs in negotiation served the NNSs in ways that supplemented the two most widely acknowledged contributions of negotiation -- the promotion of NNS comprehension of L2 meaning and their modification of interlanguage output. In particular, NS utterances of

response to NNS signals offered the NNSs data on L2 lexis and structures that could possibly be used to guide them in their internalization of interlanguage grammar. Many of the NS signals also offered learners modified versions of their interlanguage. At best, these signals offered NNSs forms for their meanings and meanings for their forms. Unfortunately, there was nothing transparent in modifications as to whether they represented more accurate versions of the NNS interlanguage or simply alternative ways to encode it.

Previous papers on negotiation have ended on a cautious note (See especially Aston, 1989 and Pica et al , in press). Of concern has been whether an emphasis on counting and comparing NS and NNS negotiation signals and responses has been too heavily grounded in the assumption that negotiation can make a difference in SLA. Although a cause - effect relationship remains to be shown, and indeed may be impossible to uncover as long as researchers continue to use a short-term approach to study negotiation, the present analysis of negotiation provides a reason to be a bit more definitive about its larger, more lasting contributions to learners' needs. Even if negotiation cannot meet language learners' needs completely, it appears to offer them a great deal of lexical and structural data on what is in the L2, and for this reason, warrants further study in regard to its role in language learning. Yet, if researchers are to provide further insight into the role of negotiation in meeting learners' needs, they must respond to the following research needs:

First, the impact of negotiation on learners must be studied over time, not just within a single recording session. Meeting this research need may not necessarily require a ten-month longitudinal study; negotiation data collected over the course of several research sessions could serve as a useful first step in charting the impact on the learner's interlanguage made by the L2 lexical and structural data offered in negotiation signals and responses. The need for longitudinal has often been suggested (e.g., by Long, 1991; Brock et al , 1986; Schmidt and Frota, 1986; and others), and it remains a crucial area of SLA theory construction and research.

Second, further research is needed on whether, and if so, how the L2 data carried by negotiation signals and responses can take care of learners' needs for both positive and negative L2 evidence. To address this research objective, researchers must figure out ways in which the activity of negotiation can be "stretched" to provide learners with data on both what is in the L2 as well as what is not in the L2. To achieve this aim, a battery of other task and activity types must be added to the current repertoire of communication tasks. Since the emphasis in communication tasks is on the exchange of message meaning, and most communication tasks do not require

structural precision for their execution, such tasks seldom require interlocutors to call attention to or to correct learners' grammar inaccuracies, or to compare the L2 input with their interlanguage output. Thus, studies such as the present one, which have asked learners to participate in communication tasks, have shed light on positive L2 data supplied by negotiation, but these studies have restricted what can be uncovered about the extent to which negotiation can provide learners with negative L2 data.

Recent work by Bley-Vroman and Loschky (1990) has brought much promise to meeting this research need. Approaches to devising structure-based tasks are offered which serve as a fruitful alternative to communication tasks in assisting learners' access to L2 data. Such tasks focus learners' attention on L2 form and thus go beyond the emphasis on conveyance and mutual comprehension of message meaning so characteristic of tasks currently used in negotiation studies. It is possible that structure - based tasks can be organized to give learners access to data on L2 grammatical morphology. For example, verb tense and aspectual data might be made available as learners negotiate with interlocutors over the sequence of events, their continuation, conclusion, or future occurrence. Data on noun phrase inflectors and functors, e.g., s plurals and articles, might be revealed through tasks which focus on the specificity of objects. Such structure-based communication tasks might yield L2 data far richer than that uncovered in research so far, as such tasks are based on both language form and content, and not only on the distribution and control of information required for task completion, which has characterized many of the communication tasks used in research on negotiation.

Third, studies must focus on whether the lexical and structural data supplied in negotiation signals and responses are quantitatively and qualitatively different from the data supplied in the course of non-negotiated interaction, i.e., as NSs simply talk with NNSs. Although research has already shown that negotiated input is more comprehensible than non-negotiated input (See Pica et al., 1987), it cannot be assumed that the the NS signals and responses of negotiation are more dense in lexical and structural data than the statements, gestures and responses in the surrounding discourse. To that end, current projects by Holliday (forthcoming) and Lewis (in preparation) are providing needed comparisons.

Finally, even if studies on negotiation indicate that interlocutors offer an important and significantly greater source of L2 data to learners as they negotiate message meaning, what must be kept in mind is that such data will not necessarily be taken in by the learner for use in language learning. The work of Pienemann (1984, 1989) serves as an important reminder that L2 learners can learn only that which they

are ready to learn. Research will be able to illuminate the extent to which learners' participation in negotiation addresses their needs for L2 learning only when researchers are sure of what it is about the L2 that learners need to learn and are ready to learn.

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² Although (3e) was also a modification category, there were too few (3e) utterances in the data to warrant more than occasional analysis of these features as L2 data.

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