Negotiation for Meaning and Peer Assistance in Second Language Classrooms

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This paper investigates the value of language classroom negotiation of meaning from both cognitive and sociocultural perspectives. According to Long (1985, 1996) comprehensible input gained through interactional adjustments such as negotiating meaning and modifying output is central to second language acquisition, and much research has been undertaken to discover which classroom activities give learners the greatest benefit from this type of interaction (Pica 1994). This paper discusses the measures typically used to identify negotiated interaction and proposes that more rigorous definitions need to be employed to separate signals of communication problems from signals of interest and encouragement. In the study reported for this paper, learners were recorded during an interactive classroom task, and the incidence of negotiation moves (learners’ clarification requests, comprehension and confirmation checks) was calculated by counting only those instances where communication problems were clearly signalled. The quantitative results show that the incidence of negotiating meaning was very low. A qualitative analysis of the data subsequently investigated what was going on in the long stretches of interaction that lacked any signs of meaning negotiation. A picture emerges of learners actively assisting each other to transact the task through co-construction and prompting. Learners expressed interest and encouragement while seeking and providing assistance and initiating self-repair of their own utterances, all in the absence of communication breakdowns. Obtaining completely comprehensible input appeared to be of lower priority than maintaining a supportive and friendly discourse. Negotiation is one of a range of conversational processes that facilitate SLA as learners work to understand and express meaning in the L2.

INTRODUCTION

Sociocultural and cognitive approaches to second language acquisition differ considerably. For cognitive approaches, second language acquisition is essentially the mental process of acquiring systems of knowledge (morphosyntactic, phonological, lexical), which make up the target language. Researchers in this field are primarily interested in how the brain processes, stores, and retrieves information, and therefore in such things as memory, attention, automatization, and fossilization (see, for example, Robinson 2001). Their main focus is on the cognitive abilities of the learner and the way these interact with the task of processing and, hopefully, acquiring
a second language. Progress in acquiring the second language system is seen as manifested by increased fluency and accuracy, and a wider range of syntactic structures, as these reflect expanding knowledge that the learner can draw on automatically.

For sociocultural approaches\(^1\) on the other hand, language development is essentially a social process. These approaches view mind as distributed and learning\(^2\) as something inter-mental, embedded in social interaction. This means that individuals and environments mutually constitute one another and persons are not considered to be separable from the environments and interactions through which language development occurs. In this view, knowledge is not owned solely by the learner, but is also a property of social settings and the interface between person and social context. Language development can be studied by examining distributed cognition—how a learner makes use of the L2 in interaction with other people and artifacts. Development is visible through microgenetic analyses of episodes of interaction, as the learner demonstrates increased independence (Ohta 2001; Hall and Verplaeste 2000; Lantolf 2000). Researchers are also interested in processes of attention and memory and how these are revealed in learner engagement in L2 interaction. Learner perspectives are a rich source of data (Kanno 2003). For researchers, preserving the integrity of environments and the people and interactions embedded in them are critical, as these work to form any development that occurs.

We acknowledge at once that the two approaches have different strengths and weaknesses. In cognitive approaches to SLA quantitative methods are generally favoured; objectivity is important and generalizability of research findings is valued, as is demonstration of causation. Dependent variables are defined, controlled, subjected to different treatments and measured statistically to discover any significant effects. From a sociocultural perspective, however, quantification such as this risks sacrificing the richness of the interaction that occurs, eliminating the subjectivity of both researcher and study participant. Selection of categories for quantification is viewed as sacrificing the whole for the sake of a partial picture that may not apply to any real-world situation. When interactions are reduced to tables and figures, other researchers are left without a way to see what really transpired or validate findings for themselves. And, while generalizability is a goal of experimental and quasi-experimental research, in SLA many studies are so small (and, it must be said, so infrequently replicated) that such claims could sometimes be questioned.

Sociocultural approaches prioritize qualitative research methodology and pay close attention to the settings and participants in interactions. Quantification may be used to gain a partial understanding of a data set, but categories for quantification must emerge post-hoc from the data being analysed; application of a pre-determined set of categories to a different data set is avoided. Descriptive work is valued, and researchers work to preserve the human experience and to avoid reductionism. However, sociocultural
approaches are unable to show causation or produce generalizable results. Research focuses on intensive analysis of small groups of subjects, hoping to build a robust picture of SLA processes through the accumulation of such small studies. Sociocultural research is a slow process because of the intensive nature of transcription and analysis. The small number of subjects and the case study approach is often criticized by those who prefer approaches able to handle larger numbers of subjects. Representativeness of data samples may be doubted as well. Whereas researchers in this tradition may present samples which illustrate a point they wish to make, other researchers have no way of knowing how typical these are of the data as a whole.

Despite these differences, researchers using each of these approaches share a strong interest in how learners develop facility in an L2 via social interaction. Both seek to understand data sets in which learners talk to one another in the language being learned. Both are interested in how it is that interaction promotes SLA. But the two research communities work in relative isolation from one another. Methodologically and theoretically, there seems to be little common ground for discussion, so there is very little collaborative work. This paper is therefore somewhat unusual, being born of a collaboration between two researchers who differently locate mental processes: a researcher (Ohta) who sees L2 development in inter-mental (between-people) processes and one (Foster) interested in the internal mental processes of SLA. Historically, the collaboration has emerged from a shared interest in naturalistic classroom data, combined with shared concerns about the role negotiation for meaning (NfM) is assumed to take in learner–learner interaction. We decided to work together in order to gain a deeper understanding of what NfM does and does not do in a particular classroom data set and to move beyond NfM to consider what other opportunities for language development occur in interactive L2 data.

In this paper, we do not try to resolve the tension between two very different theoretical and methodological approaches. They are based on such different assumptions regarding the basics of human communication and learning (see, for example, Dunn and Lantolf (1998)) that we cannot do so. Similarly, we do not aim to prove the superiority of one approach or the other, nor do we have the space to query either of them in any great depth. But anyone who is interested in language learning should be willing to explore what can be learned by delving into theoretical and methodological approaches that are not their own, and we think a multi-perspective analysis of data should be, at the very least, thought-provoking.

Our joint focus in this endeavour is on NfM, and we propose to use two sets of research tools, cognitive and sociocultural, to examine it. We wish to examine NfM ‘from within’ by using an approach congruent to that used in other NfM research (i.e. a cognitive one), and to look beyond NfM by using a sociocultural analysis of the same data. Without abandoning our respective theoretical ground, we hope that such collaboration would deepen
our understanding of the other’s point of view and our understanding of how language development proceeds. Our differences remain but do not prevent us from sharing an exploration of classroom L2 interactive processes and the important role of learner–learner interaction in language development. (Swain et al. 2002).

THE ROLE OF THE NEGOTIATION FOR MEANING IN SLA

Our first task must be to define the central term in our research. Negotiation for meaning is a very familiar concept in cognitive approaches to second language acquisition. It is founded upon Krashen’s (1981, 1982, 1985) notion that knowledge of a second language is acquired through exposure to comprehensible input. This is input which is pitched at what Krashen calls the ‘i + 1’ level, that is to say just a little beyond the learner’s current L2 knowledge and which, being embedded in input which is otherwise comprehensible, is likely to be understood, and consequently acquired.

According to Long (1985, 1996) the most valuable way in which input is made comprehensible is through interactional adjustments. These are the attempts of learners and their conversation partners to overcome comprehension difficulties so that incomprehensible or partly comprehensible input becomes comprehensible through negotiating meaning. In these negotiations, problem utterances are checked, repeated, clarified, or modified in some way (lexically, phonologically, morphosyntactically) so that they are brought within the optimum $i + 1$ level. The value in these negotiations, especially in group work, is that they can provide $i + 1$ input which is made-to-measure for individual learners and their current interlanguage level. Moreover, they provide learners with negative evidence about their own output, and push them to modify it to make it more comprehensible and more target-like (Swain 1985).

In the mid-1980s there was a considerable amount of research (of the cognitive, quantitative kind) to determine which kinds of classroom activities were most productive in terms of negotiated interaction (e.g. Varonis and Gass 1985; Gass and Varonis 1985; Doughty and Pica 1986; Rulon and McCreary 1986; Pica et al. 1989; see also Pica 1994 for an overview). Such studies suggested that information gap tasks transacted by dyads were likely to give most opportunities for NfM. There are many versions of information gap tasks, but each has the same basic rationale: hide certain information from one or more participants so that, in order to get it, they need to understand and be understood with clarity. This makes it likely that meanings will have to be negotiated, incomprehensible input will be made comprehensible and, if it contains forms and structures which are just a little beyond the learner’s current level of competence (i.e. the crucial ‘$+1$’) then second language acquisition (SLA) is facilitated. SLA is also facilitated by the learner’s having to modify utterances for which an interlocutor has
requested clarification, prompting attention to language forms and precision in phonology, lexis, and morphosyntax. Information gap activities thus provide good opportunities for learners to notice, and fill, gaps (Schmidt and Frota 1986) in their current interlanguage knowledge.

Further work into and discussions of NfM through the 1990s and beyond have continued to describe valuable negotiating opportunities arising from incidences of communication failure. For Pica (1992: 200) NfM is ‘an activity that occurs when a listener signals to the speaker that the speaker’s message is not clear and the speaker and the listener work linguistically to resolve this impasse.’ Elsewhere (Pica 1994: 494) NfM arises when ‘communication is interrupted’ or there is ‘difficulty in message comprehensibility’. For Gass and Selinker (1994: 209) NfM comprises ‘instances in conversation when participants need to interrupt the flow of the conversation in order for both parties to understand what the conversation is about’. Long (1996: 425) describes ‘communicative trouble’ which ‘can lead learners to recognize that a linguistic problem exists, switch their attentional focus from message to form, identify the problem and notice the needed item in the input.’ Similarly, Mackey et al. (2000: 476) situate NfM at points of ‘communication breakdown’ and describe it as triggered by ‘something incomprehensible [which] becomes the impetus for learners to recognize an inadequacy in their own rule system.’ For Ellis (1999: 3) it is a ‘communicative impasse’ which leads to NfM and similarly in Ellis et al. (2001) negotiation is something which occurs after a signal that there is a linguistic problem which needs explicit resolution.

Thus, learners’ linguistic problem-solving is regarded as being of positive benefit to SLA. Long’s 1996 Interaction Hypothesis, one of the most cogent and thorough arguments for the value of interaction in SLA, clearly situates interlanguage development at these moments where interactional partners attempt to resolve difficulties they are having in understanding each other.

I would like to suggest that negotiation for meaning, and especially negotiation work that triggers interactional adjustments by the NS or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways (Long 1996: 451–2, original emphasis).

Communication breakdowns are thus valuable. They orient the learner’s attention to form at just the times and in just the places where it is best exploited by internal learning mechanisms. As Skehan (1996: 1) puts it, they can be described as ‘the pressure points for language change’.

More recently, work on the role of interaction in SLA has shifted away from pairs of learners transacting an information gap task towards the recasting (e.g. Oliver 1995; Lyster 1998; Long et al. 1998; Braidi 2002) and focus-on-form episodes that are available in whole class settings (e.g. Doughty and Varela 1998; Ellis et al. 2001) and are often, although not
always, initiated by a native speaker or teacher who has not encountered a communication failure, impasse, or breakdown, (i.e. who has understood what the non-native speaker meant) but who has chosen where some language focus would be most useful. Such a shift moves us away from classroom groupwork (in which learners interact with each other) towards a situation where a more competent speaker (the teacher, or a native speaker) chooses to turn the learner’s attention productively from meaning and towards form. Much valuable work has been done on the way such feedback, recasting, and other language-related-episodes (Swain 2001) might shift a learner’s attention to language form. In this paper, however, we wish to return the focus to interaction between non-native speakers working together on a classroom task because this is an extremely common and widely-promoted practice in communicative language teaching, and because the idea is still prevalent that, as SLA is facilitated through learners negotiating solutions to communication failures, such failures could be usefully engineered through classroom task design. In this view, there is an assumption that learners are on the whole not predisposed to focus on language form, but will do so when communication failure means they have to.

FOUR PROBLEMS WITH PROBLEM SOLVING THROUGH NfM

We do not dispute that Long (1996) makes a good theoretical case for NfM as valuable because of its privileged and productive connection of input, internal learner capacities, selective attention, and output, but we raise four concerns about it:

1. it can be tedious and face threatening;
2. it is typically lexical in nature and not morphosyntactic;
3. it is hard to identify because its surface structures are often ambiguous (e.g. a clarification request can be identical in form to an expression of enthusiastic comprehension);
4. quantifying instances of NfM may not provide an accurate depiction of the value of a task in providing participants with opportunities for language learning.

Regarding the first point, Aston (1986) noted that NfM is potentially demotivating because it emphasizes a lack of success in using the target language. Learners must acknowledge not understanding or not being understood. But, as interaction is a social activity as well as a language learning one, its social dimension cannot be overlooked. Learners who partially understand, ‘getting the gist’ of what someone is saying, or who fear appearing to be pushy or a fool, may avoid interrupting to request clarification or repetition of things that are not entirely clear. The face-threatening nature of NfM was one explanation for why so little of it could be detected in Foster’s (1998) study. Actively seeking to put learners into
situations where they are somehow required to track each other’s understanding very closely (say, by designing tasks where nothing could be achieved otherwise) invites frustration and embarrassment, two feelings which probably do not facilitate SLA.

The second point is related to the first. As Lewis (1993) says, much can be communicated successfully by lexis and contextual clues alone. (This is very clearly the case in pidgin languages). The research on NfM has found that communication breakdowns are more likely to be due to problems with lexis than with morphosyntax, because morphosyntax is not so communicatively load-bearing. Missing, incorrect or unrecognized morphemes marking tense, case, or gender do not necessarily lead to communication failure in the way that missing, incorrect, or unknown words do. Sato (1986), Foster (1998), Pica (1992), and Pica et al. (1993) all find that it is predominantly problems with lexis, and not morphosyntax, that cause communication failure. Extraordinarily, of the 569 negotiation sequences identified in the Pica (1992) data, not one was morphological in nature. Thus, NfM is not only something which can be irritating and frustrating, and something which people are naturally disinclined to, it is also something which seems to miss the mark in SLA as far as morphosyntax is concerned.

The third problem, that of identifying NfM in transcripts, is one for researchers and not for learners. If NfM facilitates SLA, then finding out where, how, and why it happens and what kinds of interactional adjustments it might provoke, are all valid research questions; these questions require the researcher to identify correctly where learners attempt to repair a communication breakdown. As we discuss below, this is not straightforward. A rising intonation and verbatim repetition of a partner’s utterance may signal understanding and interest in further information just as easily as it may signal a lack of understanding and desire for clarification.

Fourth and finally, when NfM is used as a measure of a task, the quantitative analysis may not present an accurate depiction of a task’s value in terms of providing opportunities for SLA. Nakahama et al. (2001) investigated NfM in a two-way information gap task and a conversational task in a qualitative study that combined discourse analysis and participant interviews. They conclude that the traditional categories of NfM do not capture how the two tasks functioned in affording learning opportunities to participants. The conversational task resulted in fewer instances of NfM, but was more challenging and provided more opportunities to consider the broader discourse. Nakahama et al.’s findings suggest that the results of NfM research be considered with caution, as frequency of NfM moves are not the only factors which make a task useful for language learning. Their work underscores the value of a more holistic approach to SLA which looks more broadly at the wide range of opportunities learners encounter which result in greater facility with the language being learned.
THE PURPOSE OF THIS PAPER

This paper seeks to do two things. First, to examine the robustness of the measures traditionally used to identify incidents of NfM and their effectiveness in tracking communication breakdown. We look at definitions used in previous research studies and the data samples (when given) to illustrate them. We discuss the difference between the ‘surface’ form of a negotiation move (such as a confirmation check) and its pragmatic function (to express interest rather than confusion), and the potential difficulty this presents to coders.

We then examine data samples from two second language classroom tasks in which learners are exchanging information with partners and we quantify the incidence of communication problems leading to NfM, and the number of interactional modifications triggered accordingly, basing our coding not on surface structures, but on the wider context and, crucially, on interlocutor response. In other words, if the interlocutor addresses a communication failure, we assume there was indeed one.

Secondly, and in contrast to all other NfM studies, we look at the rest of the data, using a sociocultural approach (Lantolf 1994; Ohta 2001). As pointed out by Pica (1996) the processes beneficial to SLA which occur in NfM can surely also occur when learners are not stuck in some comprehension-related impasse and using a focus-on-form to get themselves out of trouble. Looking at places where there is no communication trouble, we qualitatively examine the SLA opportunities that may emerge, with particular interest in how learners support one another during peer interaction. In other words, we explore the ways that success in communicating with and assisting a partner may facilitate SLA.

IDENTIFYING THE NfM IN RESEARCH DATA

Despite Aston’s (1986) reservations that the requirement to check and clarify language can be demotivating for learners, the design of many research studies into NfM reflects an assumption that if some NfM is good for SLA, then more must be better (see for example, Pica et al. 1993; Kasanga 1996). Research such as this has sought to show which tasks and task conditions are likely to maximize its occurrence. The main methodology has involved: (1) designing and implementing an information gap task or tasks, usually requiring precise information to be pinpointed by the participants; (2) audio-recording participant talk during task implementation; (3) transcribing the talk; (4) coding instances of negotiation, typically of comprehension checks, clarification requests and confirmation checks; and (5) comparing groups or tasks based upon the frequency of these ‘three Cs’ and drawing conclusions about which task or tasks are most likely to promote SLA. Such studies all require the coding and counting of instances of negotiation.
Problems with coding and quantification have been discussed by researchers such as Ellis (1999), Polio and Gass (1997), and Schachter and Gass (1996). For reliability and generalizability of research findings, the coding of categories is absolutely critical, as is the ability of researchers to apply the categories used in previous research. Interrater reliability scores are one way to preserve internal reliability of a research study, but not necessarily its external generalizability. In order to do this, clear definitions including examples must be available for the whole research community to work from. In the case of NfM, the definitions commonly used for the NfM comprehension checks, confirmation checks and clarification requests are from Long (1980), or else are closely based on them.

DEFINITIONS OF THE THREE C’S

The original definitions of comprehension checks, confirmation checks, and clarification requests are in Long’s (1980) dissertation. Long defines these by their form and function as follows:

Comprehension checks: ‘Any expression by an NS (native speaker) designed to establish whether that speaker’s preceding utterance(s) had been understood by the interlocutor. These are typically formed by tag questions, by repetitions of all or part of the same speaker’s preceding utterance(s) uttered with rising question intonation, or by utterances like Do you understand? which explicitly check comprehension by the interlocutor’ (Long 1980: 82, original emphasis)

Confirmation checks: ‘A confirmation check was any expression by the NS immediately following an utterance by the interlocutor which was designed to elicit confirmation that the utterance had been correctly understood or correctly heard by the speaker. Thus the man? following Next to the man by the other speaker is a confirmation check. Confirmation checks are always formed by rising intonation questions, with or without a tag (the man? or the man, right?). They always involve repetition of all or part of the interlocutor’s preceding utterance. They are answerable by a simple confirmation (Yes, Mmh) in the event that the preceding utterance was correctly understood or heard, and require no new information from the interlocutor’ (Long 1980: 81–2, original emphasis)

Clarification requests: ‘Any expression by an NS designed to elicit clarification of the interlocutor’s preceding utterance(s). Clarification requests are mostly formed by questions, but may consist of wh- or yes–no questions (unlike confirmation checks) as well as uninverted intonation and tag questions, for they require that the interlocutor either furnish new information or recode information previously given. Unlike confirmation checks,
in other words, there is no presupposition on the speaker’s part that he or she has understood or heard the interlocutor’s previous utterance. While questions are the most frequent form of clarification request in these data, they are also effected by statements like *I don’t understand*, and imperatives such as *Try again*’ (Long 1980: 82–3, original emphasis).

Aside from the examples cited in these definitions, Long provided no further examples to show what utterances did or did not merit coding in these categories. The examples Long provides in his definitions show how to identify the *form*, but not how to identify the *function* of the categories. Long states that ‘*the man?* following *next to the man* by the other speaker is a confirmation check’ (Long 1980: 81). However, from this two-utterance example, it is not clear that what is occurring is, indeed, confirmation. The utterance *the man* may be working to confirm, clarify, or to do something else, depending upon the surrounding discourse, and this is not provided.

Lack of extended examples is particularly a problem for confirmation checks (Ohta, 2005) and clarification requests, the two categories which are most difficult to apply in practice.

In some negotiation research, further examples have been provided. Table 1 lists some of these.

Examples 1 through 6 illustrate utterances with the form of comprehension checks, but we do not have enough of the context to see if they function as such. Rather than indicating a communication problem, they may in fact be performing some other discourse function, such as expressing agreement or encouragement to continue. It is strange that more context is not provided to clearly show how NfM resides at points of breakdown. Pica’s (1987) examples, listed in 7 and 8, are the exception—they provide enough text to show how the indicated lines are interpreted by the interlocutor, something which is necessary in order to determine how they function in the discourse. In both 7 and 8 the indicated lines result in reformulation of the trouble-source. These responses unambiguously demonstrate that the recipients understood these lines as negotiation moves.

Thus, ample context is needed whenever coding is used because turns with the same shape have different functions in conversation. While repeating, with rising intonation, a portion of the preceding speaker’s utterance may indicate a comprehension problem, this sort of utterance has other functions and does not necessarily indicate communication difficulties. In fact, such an utterance may be used to invite the speaker to continue. A continuer is an utterance that shows that the talk is unproblematic, prompting the speaker to go on. Repetition with rising intonation may also function to provide space within the conversation for the speaker to formulate his or her answer. In this way, such utterances provide evidence of comprehension, not only of comprehension breakdown. When a speaker is able to correctly repeat the preceding utterance, it is possible that the utterance was comprehended. In order to determine, therefore, how the
repeated material is functioning, a close examination of the sequential
development of the talk is needed, including an analysis of how both
recipients’ talk relates to it. The resulting analysis may show that the
utterance is functioning to confirm or to clarify, but other functions may
also emerge. The following example from our English L2 data illustrates this
problem of determining function:

(1) C1 What do you like in London?
→ D2 London?

Table 1: Examples of confirmation checks from the research literature

(1) S1: The homemaker woman
→ S2: The homemaker? (p. 236)
Source: Pica et al. (1989)
(2) NNS: ... this game
→ NS: this game (p. 87)
(3) NNS: this picture is a view
→ NS: a view? (p. 87)
(4) NNS: This house has three window in first floor
→ NS: Three windows? (p. 87)
Source: Gass and Selinker (1994)
(5) NNS1: When can you go to visit me?
→ NNS2: Visit? (p. 210)
Source: Long and Sato (1983)
(6) S: Carefully
→ T: Carefully? (p. 276)
Source: Pica (1987)
(7) NS: did you get high marks? good grades?
→ NNS: high marks?
NS: good grades A’s and B’s ______ did you get
A in English?
NNS: oh no in English yes em B (p. 5)
(8) NNS: my country say the people from there the many
many times all time they say they are the last
aysti in the Sahara
→ NS: the last aysti? aysti?
NNS: they say maybe another word _____ in the Sahara
understand?
NS: I understand Sahara, but I don’t understand
aysti (p. 7–8)
(continues until resolved)
Source: Pica and Doughty (1986)
The form of this utterance seems to indicate a straightforward confirmation check. However, let us consider line 2 in context, as shown below:

(1a) C1 What do you like in London?
→ D2 London? (1.0) Ah, there are a lot of things to do here
→ C3 A lot?
D4 there are a lot of things to do in your free time.
   A lot of shops, and you can go bowling, skating (1.0)
   there are cinemas. Where I live, no.

Neither of the indicated utterances above, in lines D2 and C3 appears to be related to difficulties in comprehension. In D2, by repeating ‘London’ with rising intonation, the speaker provides an item which constitutes a turn, but functions to allow her time (both the one second pause and the filled pause *Ah*) to begin mentally to formulate her answer. Rather than confirming or clarifying, the most important function of this utterance may be to buy time. In C3, comprehension of ‘a lot’ does not seem to be at issue. Rather, the speaker is inviting her interlocutor to continue speaking. In continuing, the interlocutor provides examples of things she likes to do in London. In sum, this excerpt is interesting because the parties appear to have no difficulty speaking to and understanding one another, (they certainly do not behave as if communication has broken down) but are using these turns to show their interest and involvement as conversationalists.

If, as claimed by Gass and Selinker (1994: 209), NfM comprises ‘instances in conversation when participants need to interrupt the flow of the conversation in order for both parties to understand what the conversation is about’ then utterances such as those illustrated above are, in essence, the very opposite of NfM. They are examples not of conversational partners stopping to signal problems, but of partners encouraging each other to continue. The question arises whether interactions characterized by help and encouragement can be beneficial to SLA, as is claimed for interactions characterized by clarifying and checking.4

Beyond NfM: considering learner discourse from a sociocultural perspective

While NfM studies which are typically focused on instances of communication failure, (at least that is what one must conclude from the review of NfM definitions given above) research examining how learners succeed in classroom L2 peer interaction has shown that learners help one another as they interact (Donato 1994; Brooks 1992; Ohta 1995, 1997, 2000a, 2000b, 2001). Assistance, also called scaffolding (Wood *et al.*, 1976), is a feature of learner talk that is claimed to promote L2 development. This comes about as learners collaborate to create discourse in the target language. Collaboration is considered an important part of what happens when learners interact
with one another. Ohta (2001) found that adult learners of Japanese in their first two years of language classes assisted each other with a variety of peer interactive tasks. Research on French immersion students working in pairs on writing tasks shows how collaboration results in language related episodes (LREs) ‘where students reflect consciously on the language they are producing’ (Swain 2001: 53) as they seek and provide assistance with language issues (Swain and Lapkin 1998, Swain 2001; Lapkin et al. 2002). While studies of NfM have found that problems with lexis most often trigger negotiation episodes, both Ohta (2001) and Swain (2001) found that in the contexts they studied—French immersion classes and university Japanese classes, a great deal of learner collaboration was related to language form.

The Japanese language learners in Ohta’s (2001) study provided and received assistance in a variety of ways. For example, they directly asked for, and received, assistance from each other, they continued utterances that a partner was having difficulty with, chimed in with suggestions, and offered and accepted corrections. Assistance was also provided less explicitly, for example, when a peer waited, providing a partner time to compose an utterance. Learner assistance to one another often resulted in assisted performance (Tharp and Gallimore 1991; Ohta 2001)—the creation of utterances that incorporated the assistance of another. Assistance given and utilized creates a discourse that is a joint performance, something which can be seen as an important precursor of individual production.

From a sociocultural perspective, the zone of proximal development (ZPD) is used to understand how assistance is related to language development. ZPDs are evident wherever one learner is enabled to do something by the assistance of another that he or she would not have been able to do otherwise. Vygotsky (1978) defines the ZPD as ‘the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers’ (Vygotsky 1978: 86). Ohta (1995, 2001) reformulated the ZPD for L2 learning as ‘the distance between the actual developmental level as determined by individual linguistic production, and the level of potential development as determined through language produced collaboratively with a teacher or peer’ (Ohta 2001: 9) The implications of the ZPD for SLA are that what the learner can be assisted in doing is soon to be something that the learner will be able to do without help. From a cognitive perspective, we might say that what is within the zone of proximal development is within the learner’s reach, but not yet fully incorporated into the learner’s linguistic system. Language development might occur as this gap between individual and joint performance is filled and learners develop increased independence. Rather than occurring through a process of comprehending $i+1$ input, from this perspective language acquisition occurs as the learner is enabled to do things with language—in production
as well as reception—that he or she could not have done without a nudge of assistance\(^5\) (Ohta 2001). Assistance does not have the drawbacks of NfM outlined above. It does not reside in communication breakdown, it does not threaten face, and can draw a learner’s attention to features of the L2 morphosyntax, phonology and pragmatics as readily as to lexis.

**The present study**

Our second task in this paper is to analyse data transcripts of second language learners engaged with an interactive task. Two lines of inquiry are pursued by these analyses. Following a cognitive approach, we investigate quantitatively the frequency with which learners exchanging information signal communication problems to each other and seek to resolve them through NfM and modified output (Foster 1998). Following a sociocultural approach, we examine the data qualitatively to discover how learners support each other’s learning of the target language (Ohta 1995, 2000a, 2001). Because language form and discourse function do not neatly map onto each other, our study investigates NfM using definitions where function guides our coding so that the problems in comprehension or production that lead to a particular instance of negotiation can be identified.\(^6\) Learners were recorded as they transacted an interactive task, and the transcribed data were analysed for the features relating to NfM and assistance. Two research questions were addressed, the first through a quantitative analysis of the data and the second through a qualitative analysis of the data.

**Research questions**

1. How often do learners initiate negotiation for meaning during the task, and how much modified output do they produce as a consequence?
2. In the absence of overtly signalled communication problems, what interactional processes occur which might be useful for SLA?

**Participants**

The study comprised two separate data samples.\(^7\) The participants in the first were 20 young adults (19 female, 1 male) from a variety of L1 backgrounds, studying intermediate level English language part-time at an adult college in London. The participants in the other were 19 American college students studying Japanese at an American university (12 male, 9 female). They were enrolled in two different sections of a course called ‘Third-year Japanese’. Most were in their third year of Japanese instruction and had not yet been to Japan. The English L2 learners had all studied English for at least four years in their home countries before coming to London and were consequently more experienced and of a higher proficiency than the Japanese L2 learners.
Tasks

Two similar information exchange tasks were used, requiring participants to interview their partner using a list of prompt questions. The Japanese L2 learners worked in twos and threes (5 dyads and 3 triads) to ask about each other’s opinions and plans related to study abroad in Japan. The English L2 learners worked in dyads to ask their partner’s impressions of studying in England.

Data collection and coding

For both data sets audio-recordings were made during normal class times and under normal class conditions, that is simultaneously and in the same room. The first five minutes of each recording were transcribed and coded. Possible confirmation checks, clarification requests, and comprehension checks were initially identified based on turn shape, with coding refined during an examination of the function of the utterances as illuminated by the context (the preceding and following turns), and by the interlocutor’s response. Only utterances which the context and/or interlocutor response indicated a problem with comprehension were marked as negotiation moves. Utterances which had the surface shape of negotiation moves but which had other functions, were coded as a different category. Thus we coded negotiations in three ways:

1. anything with the surface structure of a negotiation move as defined by Long (1980);
2. those from (1) which were about verifying understanding or announcing non-understanding;
3. The rest of (1) i.e. those with the surface structure of a negotiation move but not clearly related to issues of comprehension;

We coded modified output in two ways:

4. modified in response to (2);
5. modified for any other reason, including (3) and self-initiated repair.

To calculate the incidence of NfM, the data were quantified by division into AS-units (Foster et al. 2000). These are similar to the T-units and c-units used in previous NfM research, (Varonis and Gass 1985; Gass and Varonis 1985; Doughty and Pica 1986; Rulon and McCreary 1986; Pica et al. 1989) but with a much more detailed definition that allows ‘messy’ spoken data to be coded in a principled way. They divide the spoken word into syntactically complete units and can be used to calculate how frequently certain features occur in numbers of speech samples. Extensive discussion and examples are provided in Foster et al. (2000). Interrater reliability was over 95 per cent on all categories on a ten per cent sample from both data sets. Following Ohta (2001), the data were also examined qualitatively.
RESULTS AND DISCUSSION

Quantitative analyses

The research question was how often learners initiated negotiation for meaning during the task which required them to exchange information, and how much modified output they produced as a consequence. To calculate the frequency of negotiation moves, the number of AS-units produced by each participant was counted. For the English L2 data, the mean was 40 AS-units, with a standard deviation of 10. For the Japanese L2 data, the mean was 29 AS-units with a standard deviation of 9.3. This showed that the Japanese L2 learners spoke rather less on average than the English L2 learners, although with a similar range in the scores. Regarding the frequency of comprehension checks, Table 2 shows that the number found in the data was very low. The nineteen Japanese L2 learners produced a total of merely two between them. The 20 English L2 learners managed 11, but this can scarcely be called frequent in data comprising 803 AS-units. None of these comprehension checks were ambiguous in function. For the other two negotiation moves Table 2 shows that, taking Long’s (1980) definition of the ‘form’ of a confirmation check a total of 13 were identified in the Japanese L2 data and a total of 12 in the English L2 data. Again, set against the mean number of AS-units we can see that for individual speakers these too happened infrequently. There were more frequent clarification requests. Long’s (1980) definition gives us 24 in the Japanese L2 data and 27 in the English L2 data.

However Table 2 also shows that when a definition is applied which uses the wider context and interlocutor reaction to identify moves that are

<table>
<thead>
<tr>
<th>Target language</th>
<th>Total AS units</th>
<th>Comprehension checks</th>
<th>Possible confirmation checks</th>
<th>Possible clarification requests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>NfM</td>
</tr>
<tr>
<td>Japanese</td>
<td>555</td>
<td>2</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>English</td>
<td>803</td>
<td>11</td>
<td>12</td>
<td>6</td>
</tr>
</tbody>
</table>

NfM = utterances which function to verify understanding or announce non-understanding.
Non-NfM = utterances with the surface shape of a negotiation category—whether confirmation check or clarification request, which do not function to verify understanding or announce non-understanding.

to learn what else in the data, besides NfM, might have occurred that is useful for SLA.
unambiguously associated with communication problems (such as verifying understanding or announcing non-understanding) the number of confirmation checks and clarification requests is much lower. Fewer than half of the possible confirmation checks in the Japanese L2 data and the English L2 data were found to function as NfM. If we are guided by interlocutor response, the other half appeared to function as expressions of interest or surprise, or invitations to continue. As for clarification requests, in the English L2 data, only 11 of 27 utterances with the form of clarification requests were found to function as NfM, with the other 16 not indicating communication problems but rather encouraging the interlocutor to continue. The picture was very different in the Japanese L2 data where only 3 of the possible 24 clarification requests performed this function, the remaining 21 are clearly to do with communication breakdown. The Japanese L2 learners signalled problems of communication far more often than their English L2 counterparts did. This could be linked to their relatively lower proficiency and lesser experience in the target language. But, set against the mean total of 29 AS-units for each of the 19 Japanese L2 learners, it can be seen that even here clarification requests are not frequent.

In fact, the overall picture for the frequency of negotiation for meaning across the two data sets shows that signalling communication problems is uncommon, and for some participants non-existent. As Table 3 shows, 11 of the 39 participants in the study did not negotiate for meaning at all, and many of the others did so only rarely.

The second part of the first research question asked how much modified output was produced as a consequence of the negotiation for meaning. The results are shown in Table 4. Here again, coding was done in two ways. All semantic, phonological, lexical and morphosyntactic modifications made by a participant to his or her previous utterance were identified, and then this total was divided into: (a) those modifications which were prompted by a communication problem as signalled by an NfM move, and (b) all other modifications, including self-initiated self-repair, and elaborations prompted by an interlocutor’s expression of encouragement, interest or surprise.

Table 3: Non-use of negotiation moves

<table>
<thead>
<tr>
<th></th>
<th>Japanese L2</th>
<th>English L2 data</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>((n = 19))</td>
<td>((n = 20))</td>
<td>((n = 39))</td>
</tr>
<tr>
<td>Participants with no NfM moves</td>
<td>5</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Participants with no comprehension checks</td>
<td>17</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>Participants with no confirmation checks</td>
<td>14</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Participants with no clarification requests</td>
<td>9</td>
<td>12</td>
<td>21</td>
</tr>
</tbody>
</table>
Table 4: Total amount of modified output

<table>
<thead>
<tr>
<th>Modified output</th>
<th>Total identified</th>
<th>In response to NfM</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese L2</td>
<td>41</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>English L2</td>
<td>36</td>
<td>4</td>
<td>32</td>
</tr>
</tbody>
</table>

NfM = verifying understanding or announcing non-understanding.

The results in Table 4 show that although 77 modifications were identified (41 in the Japanese L2 data and 36 in the English L2 data) only 10 of these (13 per cent) were prompted by signals of communication problems leading to negotiations for meaning. The large majority were not related to any interlocutor signal of communication breakdown.

In answer to the first research question, the data show that signalling communication problems through the NfM is infrequent, the total number of unambiguous comprehension checks, confirmation checks and clarification checks amounting to only 56 for 39 participants during a five minute stretch of interaction. Modifications arising from these negotiation moves is even more infrequent, with only 10 such identified in the data. This means that 46 instances of unambiguous signals of communication problems (the vast majority) did not bring about any modifications to the problem utterance.

It might be said\(^8\) that the tasks used in this study, that is a one-way information exchange, were not conducive to the NfM, and that a more tightly designed two-way task, where information must be shared carefully and exactly between participants, would have resulted in more negotiated interaction and concomitant modified output. But as Table 4 shows, modified output was being produced by the participants much more in the absence of negotiation for meaning than in its presence. A tightly designed two-way information gap task is not a pre-requisite for the production of modified output. This leads us to the second of our research questions, to look qualitatively at the stretches of interaction in our data where there is no negotiation for meaning, and to describe and evaluate what is happening there.

Qualitative analysis

Definitions and examples

The qualitative analysis found interactional processes related to assistance (co-construction and other-correction) self-correction and encouragements to continue. These are defined here, with examples provided.
Co-construction is the joint creation of an utterance, whether one person completes what another has begun, or whether various people chime in to create an utterance. Co-constructions are seen as allowing learners to participate in forming utterances that they cannot complete individually, building language skills in the process. In line 2 of the following example, Sara completes her partner’s utterance.

1 G: Watashi no uchi:: no uh chikaku de (. ) uhh booringu:  
   Near my house, bowling:  
   (G’s sentence is correct so far, but is missing the accusative particle and verb).
→ 2 Sr: o shimasu?  
   do?  
   (the verb ‘to bowl’ is ‘booringu o shimasu’)
3 G: Hai.  
   Yes.  
(Excerpted from Ohta (2001: 94–5)

Other-correction involves a peer correcting his or her partner. In line 2 of the following example, Candace corrects her partner by providing a recast of his incorrectly conjugated adjective (line 1).

1 W: Tanoshi-te? (. ) Tanoshi (. ) te  
   Fun (. ) Fun (. )?  
   (error—tries to use another form, but is wrong)
→ 2 C: Tano:shi-katta.  
   was fun  
   (this is correct)
3 W: Tanoshi-katta desu  
   It was fun  
(Excerpted from Ohta (2001: 96)

Self-correction is defined here as self-initiated, self-repair, and occurs when learner corrects his or her own utterance without being prompted to do so by another person. In the following example, Sara replaces the incorrect particle no with the particle na.

→ 1 S: Kirei no hi- kirei na hito I think.  
   Beautiful—Beautiful person, I think.  
   (error: S first picks the wrong particle, but self-corrects)
(Excerpted from Ohta (2001: 102, #16)

Continuers were discussed above with reference to confirmation checks. They function to express an interlocutor’s interest in what the speaker is
saying and to encourage the speaker to go on. Below is an another example from our data.

2  M1  I wasn’t so fat before I came to England
    V2  fat?
    M3  yeah, but now I eat a lot of bread.

V’s use of a continuer provides M with the opportunity to elaborate. The learners’ expression of interest, through the use of continuers, provides a supportive environment which encourages increased L2 production.9

The qualitative analysis of the data found ample evidence of the learners from both data sets giving and receiving assistance in a variety of ways, using co-constructions, self-corrections, other-corrections and continuers to build their discourse. One of the ways learners obtained assistance was simply to ask for it, and when they did so they generally received a helpful answer. But learner assistance also occurred when it was not explicitly requested. The learners were sensitive to the difficulties their partners were experiencing and proactively offered a variety of conversationally-based assistance, including co-construction, and other-correction. Learners incorporated the assistance received from peers into their own utterances. In the absence of NfM, learners showed evidence of monitoring their own speech by engaging in self-correction, as discussed above—and producing modified output as a result.

Rather than occurring in isolation, strategies were often used in combination as learners worked to successfully converse with one another. In Excerpt 3, ‘L’ asks ‘N’ if he plans to study abroad, and the following conversation ensues:

3  L1:  Ah Ryuugaku suru tsumori desu ka? Itsu desu ka?
       Um, do you plan to study abroad? If so, when?
    N2:  Ah kyoo
       Um today
    L3:  (itsu)
       (when)
    N4:  Ima kara he- ((laughter token)) (2) ninen (1.5)
       From now he- ((laughter token)) (2) two years (1.5)
    → L5:  Ato?
       Later? (Note: this sounds odd in English but it is correct in Japanese)
    → N6:  Un. Ninen ato
       uh huh two years later (this means “in two years”)
    → L7:  Sotsugyoo suru a- shita: ato suru ato?
       After you graduate (nonpast form) a- graduate (completative aspect)
       graduate (nonpast form)?
    → N8:  ah hai. hai. [Sotsugyoo sotsugyoo shita ato.
This excerpt includes co-construction, incorporation of what was offered through co-construction into the initial speaker’s utterance, and self-correction. In line 1, L asks a question from the worksheet. N begins to formulate an answer in line 4, but pauses without finishing the utterance. In line 5, L engages in co-construction, offering a possible next word for the utterance left incomplete by N. N incorporates this word into his line 6 utterance. L asks a follow-up question, ‘after you graduate?’ in line 7, and engages in self-correction, but shows a lack of certainty of whether or not to use a completative aspect in the utterance. In fact, after self-correcting to the appropriate form, the student reverts to the incorrect form. In line 8, N’s response includes the correct form, which provides confirmation to L. In this example, we see how co-construction, incorporation of language offered by a peer, and self-correction all occur in a short span of conversation. Rather than seeing communication breakdown accompanied by NfM moves, we see the students assisting each other in building a conversation in Japanese.

Learners offered correct words and forms to one another when a partner hesitantly used incorrect language. Hesitation may be seen as an indirect request for assistance. Excerpt 4 from our ESL data provides an example:

4 J1: I like the transport here because it’s very practical, and it’s very ra- (2.5) rapidly (1.0)
  ➔ K2: fast
  J3: it’s very fast

Here, J has apparent difficulty choosing an appropriate word to describe public transportation in the UK. J’s difficulty is evidenced by the pause as the word is formulated. This pause may signal an implicit request to K for assistance. In response, K offers a different (and more appropriate) lexical item, ‘fast’, which J then incorporates into his line 3 utterance. Other-corrections were a notable feature in our data, providing a useful resource to a struggling peer.

Excerpt 5 provides further examples of assistance, showing an explicit request for assistance and how that request resulted in provision of the correct form, which the speaker repeated. In this example, the three learners are talking about how a homestay is a good thing if one gets a good host family:

5 E1: Hehehe. Ii kazoku dattara ii desu. Moshi kazoku ga dame dattara
         Hehehe. If you have a good family then it’s a good thing. But if you have a bad family
The excerpt begins with an example of co-construction as I completes E’s line 1 utterance in line 2. Then, in line 5, I attempts to say ‘depending on family’. His utterance is incorrect and he shows his uncertainty both by using fillers (‘ee aa’) and by asking the others about it and providing an English translation of what he is trying to say in Japanese. As J appears to think over the question in line 6, E agrees with I; however, it appears that E is agreeing that it all depends on the family rather than responding to I’s question about the form. Then, J offers an answer to I’s question that presents another incorrect form that is, however, nearly correct. Then E, in line 9, other-corrects J’s answer, giving the correct form. In the final line of the excerpt, I repeats the form. That E knows the correct form, even pronouncing the geminate correction, is evidence that his line 6 agreement was with the content of I’s utterance ‘depending on family’. Even though E appears to be meaning-oriented in his initial response to I, he does provide the correct form when that offered by J is incorrect.

While other-correction is an important resource for learners in our data, self-correction and modification of learners’ own utterances were more common than other-correction. These learners of Japanese and English show the same preference for self-correction that is usual in non-pedagogical discourse (Schegloff et al. 1977). Here are some examples of self-repair:

(a) L: I had no problem or I haven’t had problems.
(b) M: I only know- I only knew how to read when I was- after the first year of being in school
(c) H: Ryuugaku shimasu shitai desu.
   I will study abroad I want to study abroad.
Learner assistance and self-correction related to both expression and comprehension of form and meaning. In fact, we found the learners to be quite form-oriented in both their assistance and their self-correction, as shown in the examples above.

There were differences between the English and Japanese data in terms of the nature of the interaction that transpired. Compared to the English language learners, the Japanese language learners were of lower proficiency and had more difficulty creating utterances in the language. In the quantitative analysis, we found that the Japanese learners’ utterances included more NiM. Qualitatively, we also found greater utilization of mutual assistance. In other words, more ZPDs were created; there were more places in the data where learners relied on one another in order to proceed. As assessed by the extent to which the English language learners collaborated or relied upon one another for assistance, it seems that the English language learners found their conversational task to be easier. Their interactions provided opportunities for displays of supportive interest and self-correction, and, as already noted in the quantitative analysis, they produced a great deal of modified output.

While NiM has been prioritized as a key locus of SLA, our data show that when NiM is absent, there is much occurring which should promote language acquisition and that the learners we studied pool their resources to promote each other’s language development. For understanding SLA, a discovery approach to classroom talk seems useful in understanding the broader range of what is happening and how that might work to help or hinder language learning.

CONCLUSION

We find that overtly signalled communication breakdowns, as typified by the classic ‘three Cs’, are not the norm in our data, but are a subset of a larger variety of conversational moves learners make in the process of talking with one another and assisting one another with the interactive task at hand. We see scarcely any evidence at all of learners ‘interrupting the flow’ of the interaction in order to verify what their conversation is about (Gass and Selinker 1994: 209). But we do see evidence of learners repairing and rewording their own utterances, and assisting each other to both find the right form and to express meaning. We see evidence of learners supporting each other, frequently expressing interest in what their
interlocutor is saying and giving encouragement to continue. We regard this
as a sign of the success these learners have in using the target language
in these classes. They are sharing their meanings while monitoring and
modifying their own and each other’s utterances, minimizing overt
communication breakdowns, and the accompanying frustration. To take a
cognitive perspective, we might say that the frequency of these attempts
to modify utterances are signs that the learners are indeed focusing on form
and are not content to let their interlanguage fossilize comfortably. From a
sociocultural perspective we might prefer to say that in such exchanges more
ZPDs were created—more places in the data where learners needed to rely
on one another in order to proceed. For both approaches the infrequency of
negotiations for meaning can be explained either by the fact that learners
mostly understood each other very well, or as in Foster (1998), because they
chose to avoid potentially face-threatening and discouraging detours from
the subject of the interaction.

We have not sought to merge a cognitive view of SLA with a sociocultural
one, nor to show one as superior to the other. Rather, our goal has been
collaboratively to apply our differing perspectives and research techniques
to the same data set in order to come to a better understanding of the
opportunities for second language development in classroom L2 interaction.
We believe that in this way a fuller picture emerges of the potential of
interactive language learning and that our combined analysis illuminates
more in the data than either approach would do on its own. The interactive
task is revealed here as a social event to which learners bring their instinct
to be co-operative and helpful, and to express a natural human interest
in what their interlocutor is saying. We also see that this entails learners
paying attention to target language forms, in both their own output and
that of their interlocutor, and not only at rare moments of communication
breakdown but also at moments when learners offer help and encourage-
ment. One may choose to find within such moments examples of a focus-on-
form, or a language related episode, or a ZPD, but all are important language
learning opportunities.

To sum up we would make four main points.

First, it is not a straightforward business to identify NfM moves and a
qualitative approach to the definitions needs to be adopted by looking at
the interaction in a wider context than just the immediately adjacent turns,
and looking especially at the interlocutor’s interpretation of an utterance
with the surface shape of a negotiation move. Did the interlocutor think it
was a signal of a language problem, a signal to stop and confirm or clarify?
Or was it taken as an invitation to continue, to expand, to explain? Careful
qualitative analysis is necessary prior to quantitative analysis of discourse
data (Schegloff 1993). Stimulated recall (Gass and Mackey 2000) would
provide an avenue for exploring what a speaker understood, did not
understand, or may have intended by a particular utterance. Indeed recent
research has effectively used this technique to better understand contextual
factors and human relationships and their impact on classroom language learning (Morris and Tarone 2003).

Secondly, although NfM and attendant modified output is very infrequent in tasks such as the discussion/interview tasks we used, it would not be true to say that, therefore, the task design is not a good one for promoting SLA. A developmentally appropriate topic and task, a desire to express oneself, a supportive listener, a friendly and non-face-threatening environment in which to monitor one’s own output—these are likely ingredients of a task that is good for promoting progress in the target language, whether the information exchange is one way, two way, required, optional, or any other task type label. Our study has shown that learners can take plenty of opportunities to modify their output and focus on form without the requirement to exchange information exactly or negotiate for meaning.

Thirdly, we would suggest that if meanings are generally clear and communication is supportive and unproblematic, as it generally was for both the Japanese and English language learners, it is arguable that learners could thus have spare attention to give to form, both of their own and of their partners’ language. It is possible, perhaps likely, that a learner in a successful interaction is able and willing to focus on form without having first to be shunted into a communication problem. Being encouraged to go on because someone has understood and wants to hear could benefit target language progress just as much as NfM.

Lastly, we do not claim that NfM is unimportant. It can and does happen when communication problems inevitably arise. But far from being central to SLA, we would claim it represents just one of the many ways language development is advanced through interaction. Social interactive processes are important, whether understood from a cognitive perspective as triggering acquisition in the brain, or from a sociocultural perspective as the embodiment of the language development in process. Interactional processes including negotiation for meaning and various kinds of peer assistance and repair are among the many ways learners gain access to the language being learned.

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The authors would like to thank Martin Bygate, Gabi Kasper and four anonymous reviewers for their valuable comments on previous drafts of this paper.

NOTES

1 Researchers taking this sort of perspective may use terms such as sociocultural theory (SCT), activity theory, Vygotskian psycholinguistics, or language socialization to indicate their theoretical framework. These terms are not interchangeable, but generally share a common foundation in the work of Vygotsky and his students.
2 Sociocultural approaches reject dichotomies such as Krashen’s acquisition/learning distinction, so here ‘learning’ is not meant to contrast with ‘acquisition’. In this paper, the terms acquisition, learning and development are all used to refer to a learner’s progress with the language being learned.

3 While discussing NfM we will primarily use the terminology traditionally used in cognitive SLA research. While socioculturally-oriented L2 researchers would dispute NfM on the basis of its model of communication (input→processing→output), here we accept NfM research on its own terms and discuss it accordingly.

4 One reviewer has questioned our critical analysis of confirmation checks, saying that no researcher would possibly make the mistake of considering a continuer to be a confirmation check. However, the authors have talked with both researchers and graduate students who, following two-line examples given in previous research, have coded turns like the continuers in Excerpt 1 as NfM.

5 The ZPD is not equivalent to $i + 1$. See Dunn and Lantolf (1998) and Kinginger (2001) for a thorough discussion of the relationship between these two constructs.

6 This is not to say that unsignalled communication breakdowns are not occurring. Foster (1998) points out that some participants appeared loathe to signal communication problems and were prepared to let them pass. The only way to illuminate these is to use stimulated recall (Gass and Mackey 2000), having students listen to the audiotapes and indicate places where they had not understood the interlocutor but had not made any check or request. This procedure was beyond the scope of this study, whose purpose was to investigate overtly signalled NfM.

7 We would stress these groups are data samples and not part of a controlled experimental setup. As we are not testing hypotheses and thus not using control and experimental groupings, the differences in proficiency, L1, target language, task details and group numbers do not undermine the validity of our observations. Our samples are from two classrooms in which communicative language tasks are often used, and we are looking to see what kinds of learning opportunities actually arise, compared to those which we might expect to arise.

8 Indeed a reviewer has raised this objection: that our task design was not tight enough and a two-way required information exchange would have been a better choice. But our transcripts make it clear that modified output does not have to be engineered through task design.

9 A reviewer raises the possibility that this is NfM. However, the interlocutor does not respond as if it were a communication problem but as an invitation to elaborate. And surely when a woman says ‘I wasn’t so fat before’ and the interlocutor replies ‘fat?’ with a rising and surprised intonation, it is a conventional and polite rejection of her description of herself as overweight. (At least among the women we know.)

10 A reviewer felt that E, in line 7, could just as likely have been agreeing with the form of line 5. This is unlikely since it is E who provided the correct form in line 9. E’s Japanese is highly fluent and grammatical compared to the other students in the data set. Both specifically (evidence that E knows the form (line 9)) and in general, the data provide evidence of E’s linguistic...
knowledge that belies an interpretation that E was approving of the incorrect form uttered in line 5.

11 Stimulated recall is a time-consuming procedure involving use of a stimulus (such as play-back of an audio or video tape) and interview. It is most accurate when the post-task interview is immediate. As such, it would be difficult to use for a classroom study. See Gass and Mackey (2000) for an in-depth treatment of the applications and benefits of stimulated recall methodology.

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