SSLA, **28**, 169–178. Printed in the United States of America.
DOI: 10.1017/S0272263106060086

INTRODUCTION

Alison Mackey
Georgetown University

Susan Gass
Michigan State University

Interaction research has come a long way since its beginnings nearly 25 years ago. The aim of this special issue is to demonstrate how the methodological boundaries of interaction research continue to be expanded with the use of new and interesting methodological angles and techniques. Our goal is to further our insights into the question that seems to be paramount in the interaction field at the moment—namely, how does interaction work to bring about positive effects on second language (L2) learning? The articles collected here suggest that new methodologies promise to open up avenues of research that will allow us to gain insights into the interaction-learning relationship.

Initially, the exploration of interactions between native speakers (NSs) and nonproficient nonnative speakers (NNSs) of a language was descriptive in nature, and the research largely focused on the ways in which conversations between L2 learners and NSs were structured. In this early descriptive groundwork (e.g., Gass & Varonis, 1985; Long, 1980; Pica, 1987, 1988; Pica, Young, & Doughty, 1987; Varonis & Gass, 1985), the goal was to describe the ways in which conversations with language learners at lower levels of proficiency differed from conversations with fluent speakers. Naturally, such research included a good deal of analysis and investigation into the frequency, functions, and patterns of negotiation routines, including clarification requests, comprehension checks, and confirmation checks, as well as into the possible functions of comprehension as a stepping stone to learning. In one example of such early research, Wagner-Gough and Hatch (1975) reported on the linguistic behavior of a young Chinese speaker learning English who often incorporated information from a preceding utterance to construct his own discourse. They presented this tendency as support for their now famous argument that conversation was used not only to practice the L2 but also as an actual venue

Our intent in this special issue is to show some of the current methodological techniques being used to provide insights about how interaction works to promote L2 learning. We would like to thank the contributing authors who have made interesting and worthwhile contributions to help us attain this goal as well as the *SSLA* editorial team for all their help in bringing this issue to completion.

Address correspondence to: Alison Mackey, Department of Linguistics ICC 460, Georgetown University, Washington, DC 20057; e-mail: mackeya@georgetown.edu.

© 2006 Cambridge University Press 0272-2631/06 $12.00

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press

to support learning. From this descriptive research evolved investigations into the value and function of particular discourse patterns. For example, Long (1983a, 1983b) attempted to provide an explanatory framework for the descriptive data that were accruing. He proposed that the discourse structure and the interactional modifications that were part of this discourse helped the learner to comprehend what was being said—an essential part of acquisition. In other words, specific aspects of interaction provided learners with opportunities to gain new linguistic information. Many studies throughout the 1980s and early 1990s examined the links between conversation and comprehension.

In the mid-1990s, researchers began to move beyond suggesting why interaction might be useful in L2 learning and toward demonstrating empirically that it was, in fact, useful. For example, with an indirect argument based on interlocutors' success in following spoken directions, Gass and Varonis (1994) suggested that interaction could potentially have positive effects on L2 learners' later production. Mackey's (1999) study of English as a second language (ESL) question formation showed that active participation in interaction was associated with learning, and Ellis, Tanaka, and Yamazaki (1994) likewise showed positive effects for interaction. Although there are a few studies (e.g., Loschky, 1994) that did not find such effects on language acquisition, researchers had enough of an empirical basis to begin asking questions about the mechanisms of interaction-driven L2 learning.

These developments were codified by Long in his important 1996 update of the interaction hypothesis. In its simplest form, the interaction hypothesis states 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, pp. 451–452). Thus, interaction-based research attempts to account for various aspects of L2 learning through learners' exposure to language, their production of language, and the feedback they receive on their production. Gass (2003) also pointed out that interaction research "takes as its starting point the assumption that language learning is stimulated by communicative pressure and examines the relationship between communication and acquisition and the mechanisms (e.g., noticing, attention) that mediate between them" (p. 224).

In a recent update of this line of research, Gass and Mackey (in press) argued that it might be time to acknowledge that the term *interaction hypothesis* needs to be reevaluated, due, in particular, to advances in empirical research. They pointed out that the facilitative role of interaction in learning is now well established (see Table 1 for examples of studies that suggest or demonstrate a link between interaction and language development in a variety of contexts) and that given the limitations implied by the word *hypothesis*, it might be necessary to reevaluate the appropriateness of the term with respect to current ideas and the body of research findings on interaction. As Long (1996) also pointed out, the interaction hypothesis includes some aspects of the input hypothesis (e.g., Krashen, 1982, 1985) together with the output hypothesis

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press

Table 1. Sample studies suggesting a role for interaction in L2 production and development

Classroom contexts	Laboratory contexts
Doughty & Varela (1998)	Ayoun (2001)
Ellis, Basturkmen, & Loewen (2001)	Braidi (2002)
Ellis & He (1999)	de la Fuente (2002)
Ellis, Tanaka, & Yamazaki (1994)	Gass & Varonis (1994)
Loewen & Philp (in press)	Han (2002)
Morris (2002)	Iwashita (2003)
Ohta (2000)	Leeman (2003)
Oliver (2000)	Long, Inagaki, & Ortega (1998)
Storch (2002)	Mackey (1999)
	Mackey & Oliver (2002)
	Mackey, Oliver, & Leeman (2003)
	Mackey & Philp (1998)
	Mackey & Silver (2005)
	McDonough (2005)
	Muranoi (2000)
	Oliver (1995, 1998, 2002)
	Philp (2003)
	Pica, Holliday, Lewis, & Morgenthaler (1989)
	Shehadeh (1999, 2001)
	Silver (2000)

(Swain, 1985, 1995, 2005); Gass and Mackey further pointed out that in addition to its designation as a hypothesis, this line of research has also been referred to as the input, interaction, and output model (Block, 2003; also used by Thomas, 2005, although it is not clear whether she used this term only to refer to Block's discussion of it) and as the interaction hypothesis in a discussion of input and theory (Carroll, 1999). Based on VanPatten and Williams' (in press) arguments about theory construction and evolution, Gass and Mackey illustrated that the interaction approach includes elements of an *hypothesis* (an idea that needs to be tested about a single phenomenon), elements of a *model* (a description of a process or a set of processes that comprise a phenomenon), and elements of a *theory* (a set of statements about natural phenomena that explains why events occur the way they do). Thus, they suggested that this line of research might be better characterized as an approach or model. Jordan (2005) made a similar point regarding the evolution of the interaction hypothesis in his book on theories in SLA.

Having firmly established the interaction-learning link, researchers have begun to extend this knowledge base to new contexts, linguistic forms and languages, and interpretations of feedback. This approach currently allows research to move beyond the question of whether interaction plays a role in development to asking how it facilitates development. It has also entailed a broadening of the research methods employed. Research methods in early

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press

interaction-learning research were relatively similar, with most research involving a pretest-posttest (delayed posttest) design and with the treatment involving some sort of interactive task (see Pica, Kanagy, & Falodun, 1993, for a task framework). In general, most treatment data have been oral and gathered through the use of one or more of the following: picture description tasks, spot the difference tasks, jigsaw tasks, consensus tasks, ordering tasks, and consciousness-raising tasks. There have also been a few studies of interaction in writing, carried out using tasks (often one of the preceding) and employing a computer as the medium. However, the increasing emphasis on how interaction mediates development, which is a new research focus with different research questions, has necessitated a retuning of the methodological approaches used to investigate L2 interaction. In other words, researchers have begun to develop and adapt methodologies, look for different tools of analysis, and create new modes of testing L2 knowledge in order to obtain a more detailed and nuanced picture of the mechanisms of the interaction-learning relationship.

One focus of current research, for example, relates to learner-internal cognitive processes during interaction. Within this newer paradigm, novel types of data collection measures are being used (e.g., introspective measures such as immediate and stimulated recalls are employed to better understand learners' mental processes and processing; see Gass & Mackey, 2000, for explanation). The concept of tasks is also being extended within interaction-based studies—for instance, through the design of tasks that tap into a variety of learning processes. Emphases that were previously restricted to a different line of research in task-based learning, such as pretask planning, are also beginning to surface in interaction research.

Another major area of development is in coding systems. For example, as part of their analyses, researchers have recently begun to code what are known as language-related episodes (LREs), which refers to parts of interactions in which learners monitor or talk about their language use, or both. Beginning with the work of Kowal and Swain (1994), LREs have been discussed and documented in a range of discourse contexts and settings. They have moved the research agenda into a new and more socially informed area. Coding systems from other areas of L2 research, which focus on the constructs of fluency, accuracy, and complexity, are also being employed by some interaction researchers.

Finally, interaction researchers increasingly concern themselves with the results of interaction on different types of knowledge (e.g., implicit vs. explicit knowledge and controlled vs. automatic knowledge) as well as the theoretical relationship between online processing, reports that suggest noticing has taken place, and the nature of interaction-driven learning. The Epilogue returns to these topics.

Each of the papers in this special issue pushes methodological boundaries to address current questions within the interactionist paradigm, driving methodology forward in different ways. The papers describe studies conducted in

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press

classroom and experimental settings, studies with L2 and foreign-language learners (and teachers), and studies incorporating a range of ages and first-language backgrounds. The authors discuss the role of tasks in their studies as well as their experimental procedures, coding methods, pretest and posttest types, and participants. In considering interaction-driven L2 learning, their research focuses on different aspects of interaction, including—but not limited to—recasts, negotiation, LREs, and modified output.

We begin the issue with a study by McDonough on syntactic priming (a speaker's tendency to produce a previously spoken or heard structure), which she explored as one possible factor in the beneficial relationship between interaction and L2 development. The application of priming research is a relatively new move in interaction research and might help to explain the consistent repetition of forms found in earlier interaction studies (e.g., Mackey, 1999). McDonough carried out two experiments that examined the occurrence of syntactic priming; both studies employed a technique known as confederate scripting to elicit dative constructions from advanced English L2 speakers. In this technique, one of the participants in a task, unbeknownst to the other participant, is a confederate (a knowledgeable assistant) to the researcher and is often basing his or her production on a script. In McDonough's first experiment, the participants ($n = 50$) received both prepositional and double-object dative primes. Her analysis indicated that syntactic priming occurred with prepositional datives. In experiment 2, the participants ($n = 54$) received double-object dative primes only, and results showed no evidence of syntactic priming. McDonough speculated about a potential role for syntactic priming in explaining how L2 development occurs through interaction. Furthermore, whereas learners' interactions with their interlocutors have often been studied in contexts in which the utterances of all parties are authentic (although—as in much discourse involving learners—teachers or NSs sometimes feign a lack of comprehension), her experimental study showed that interactions might be contrived in other ways in order to create contexts more conducive to the examination of specific processes of interaction.

The next study in this special issue considered the context of interaction moves in relation to language learning. Carpenter, Jeon, MacGregor, and Mackey focused on a problem pointed out by a number of interaction researchers—namely, the fact that recasts might be ambiguous. Rather than perceiving recasts as containing corrective feedback, learners might see them simply as literal or semantic repetitions without any corrective element. Carpenter et al. investigated this issue empirically, with a focus on learners' interpretations of recasts in interaction. In another technique not previously used in interaction research, they edited video clips to manipulate the context in which recasts were seen. They showed the clips of recasts and repetitions to advanced ESL students ($N = 34$). One group saw clips edited to remove the learners' initial nontargetlike utterances, whereas another group saw the same video clips with the initial nontargetlike utterances included. Learners in both groups were asked to indicate whether they thought they had heard a recast, a repetition,

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press

or something else. A subset of learners provided simultaneous verbal reports while they evaluated the clips. Carpenter et al. report that learners who did not hear (or see) the initial problematic utterances were significantly less successful at distinguishing recasts from repetitions, which suggests that the contrast between a problematic utterance and a recast contributes to learners' interpretation of recasts as corrective. Consistent with previous research, their study showed that morphosyntactic recasts were less accurately recognized than phonological or lexical recasts. The verbal protocol data suggested that learners were not looking for nonverbal cues from the speakers. In sum, the manipulation of the discourse context for recasts in this study allowed Carpenter et al. to test claims regarding which factors contributed to learners' interpretations of recasts.

In another experiment reported in this issue, Polio, Gass, and Chapin report on NSs' perceptions in interactions with language learners—an innovative approach because NSs have not generally been a focus in previous interaction research. Pointing out that corrective feedback is related to a variety of task and interlocutor variables, Polio et al. examined how the background of a NS, in terms of amount of interaction experience with NNSs, impacts the quantity of recasts provided. Their study used stimulated recall protocols to probe the interaction patterns of two groups of NSs interacting with L2 learners. Eleven NSs of English who had minimal experience with NNSs each completed an information exchange task with a L2 learner, as did eight NSs of English who were experienced ESL teachers. Immediately after the task, each NS participated in a stimulated recall, in which they viewed a videotape of the interaction and commented on it. Although quantitative results did not show a significant difference in the number of recasts provided by the two groups, there was a difference in the amount of NNS output: The less experienced NSs talked much more and provided fewer opportunities for the learners to talk. This finding was corroborated by the stimulated recalls, which showed that the more experienced NSs, who seemed to view themselves as language teachers even outside of the classroom, had strategies for and concerns about getting the learners to produce output. Additionally, they demonstrated greater recognition of student comprehension, student learning, and student problems. The NSs with little experience were more focused on themselves, on student feelings, and on procedural and task-related issues. Obviously, these factors must influence learners' interactions both inside and outside of the classroom. This laboratory-based study showed that NSs and their level of experience with language learners can impact interactional processes.

Moving from the laboratory to the classroom, Lyster and Mori's study extends the framework of interaction research through a comparative analysis of teacher-student interaction, in which the authors applied the same coding scheme to two different instructional settings at the elementary-school level (18.3 hours in French immersion and 14.8 hours in Japanese immersion). As in Sheen's (2004) comparative analysis of settings in interaction, they inves-

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press

tigated a number of different interactive constructs, including the immediate effects of explicit corrections, recasts, and prompts on learner uptake and repair. The results were similar to Lyster's previous findings in that teachers in both settings provided more recasts than either prompts or explicit correction moves (e.g., Lyster & Ranta, 1997). However, Lyster and Mori found distinctively varied student uptake and repair patterns in relation to feedback type depending on setting, with the largest proportion of repairs resulting from prompts in the French immersion classroom and from recasts in the Japanese immersion classroom. Based on their findings, Lyster and Mori introduced a new hypothesis about classroom interactional feedback—the *counterbalance hypothesis*—in which they claimed that instructional activities and interactional feedback that act as a counterbalance to a classroom's predominant communicative orientation are likely to prove more effective than instructional activities and interactional feedback that are congruent with it.

Continuing with the theme of instructional activities and feedback, Pica, Kang, and Sauro's article describes how information gap tasks can be designed as instruments for data collection and analysis and for treatments in interaction research. Communicative tasks have been a cornerstone of interaction research, and their use in experimental and classroom contexts is ubiquitous. Interestingly, research on the development of tasks themselves—as opposed to the linguistic products of tasks—has been somewhat scarce in interaction work. Pica et al. showed how to develop such tasks, and they presented data on the role of tasks in drawing learners' attention to L2 forms that are difficult to notice through classroom interaction alone. They described closed-ended, precision-oriented tasks that require the exchange of uniquely held information, with a focus on the role of these tasks in promoting modified interaction among participants and orienting their attention to form, function, and meaning. Pica et al. claimed that tasks reduce researcher dependence on externally applied treatments and analytical instruments that are not integral to the interaction. To illustrate their methodology in use, they also reported on a study in which six pairs of intermediate-level English L2 learners carried out three types of information gap task in classrooms. The learners first read passages on familiar topics with sentences that contained L2 forms that were low in salience and difficult to master, but developmentally appropriate. They were then required to identify, recall, and compare the forms, their functions, and their meanings. The results showed close relationships between (a) attentional processes, (b) recall of form, function, and meaning, and (c) the interactional processes that supported learners' efforts to identify, recall, and compare the targeted low-salience L2 forms.

We conclude the empirical research in this special issue with an article by Ellis, Loewen, and Erlam that takes a new perspective on the impact of interaction. Whereas previous studies have considered and compared the effects of implicit and explicit corrective feedback on learning in general, Ellis et al. examined the effects of these two feedback types on implicit and explicit L2 knowledge, using different tests for each kind of knowledge. In an experimen-

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press

tal design that involved two treatment groups and a control group, lower-intermediate learners of English completed two communicative tasks during which they received either recasts (implicit feedback) or metalinguistic explanation (explicit feedback) in response to utterances that contained errors in the target structure (past tense *-ed*). Learning outcomes were measured by means of an implicit knowledge test (oral imitation) and two explicit knowledge tests (untimed grammaticality judgments and a test of metalinguistic knowledge). The tests were administered prior to the instructional treatment, 1 day afterward, and again 2 weeks later. Statistical comparisons of the learners' performance on the posttests showed a clear advantage for explicit feedback over implicit feedback on both the oral imitation and grammaticality judgment posttests. Thus, the results indicated that explicit feedback benefited implicit as well as explicit knowledge. In what could be an interesting and useful development in interaction research, Ellis et al. suggested that their results point to the importance of including measures of both implicit and explicit knowledge in experimental research of this nature.

REFERENCES

Ayoun, D. (2001). The role of negative and positive feedback in the second language acquisition of the passé composé and imparfait. *Modern Language Journal*, *85*, 226–243.

Block, D. (2003). *The social turn in second language acquisition*. Washington, DC: Georgetown University Press.

Braidi, S. M. (2002). Reexamining the role of recasts in native-speaker/nonnative-speaker interactions. *Language Learning*, *52*, 1–42.

Carroll, S. (1999). Putting 'input' in its proper place. *Second Language Research*, *15*, 337–388.

de la Fuente, M. J. (2002). Negotiation and oral acquisition of L2 vocabulary. *Studies in Second Language Acquisition*, *24*, 81–112.

Doughty, C. J., & Varela, E. (1998). Communicative focus on form. In C. J. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 114–138). New York: Cambridge University Press.

Ellis, R., Basturkmen, H., & Loewen, S. (2001). Learner uptake in communicative ESL lessons. *Language Learning*, *51*, 281–318.

Ellis, R., & He, X. (1999). The roles of modified input and output in the incidental acquisition of word meanings. *Studies in Second Language Acquisition*, *21*, 285–301.

Ellis, R., Tanaka, Y., & Yamazaki, A. (1994). Classroom interaction, comprehension and the acquisition of L2 word meanings. *Language Learning*, *44*, 449–491.

Gass, S. M. (2003). Input and interaction. In C. J. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (pp. 224–255). Oxford: Blackwell.

Gass, S. M., & Mackey, A. (2000). *Stimulated recall methodology in second language research*. Mahwah, NJ: Erlbaum.

Gass, S. M., & Mackey, A. (in press). Input, interaction and output in SLA. In B. VanPatten & J. Williams (Eds.), *Theories in SLA*. Mahwah, NJ: Erlbaum.

Gass, S. M., & Varonis, E. (1985). Variation in native speaker speech modification to nonnative speakers. *Studies in Second Language Acquisition*, *7*, 37–58.

Gass, S. M., & Varonis, E. (1994). Input, interaction and second language production. *Studies in Second Language Acquisition*, *16*, 283–302.

Han, Z. (2002). A study of the impact of recasts on tense consistency in L2 output. *TESOL Quarterly*, *36*, 543–572.

Iwashita, N. (2003). Negative feedback and positive evidence in task-based interaction: Differential effects on L2 development. *Studies in Second Language Acquisition*, *25*, 1–36.

Jordan, G. (2005). *Theory construction in second language acquisition*. Amsterdam: Benjamins.

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press

Kowal, M., & Swain, M. (1994). Using collaborative language production tasks to promote students' language awareness. *Language Awareness*, *3*, 73–93.
Krashen, S. (1982). *Principles and practices in second language acquisition*. London: Pergamon.
Krashen, S. (1985). *The input hypothesis: Issues and complications*. London: Longman.
Leeman, J. (2003). Recasts and second language development: Beyond negative evidence. *Studies in Second Language Acquisition*, *25*, 37–63.
Loewen, S., & Philp, J. (in press). Recasts in the adult L2 classroom: Characteristics, explicitness, and effectiveness. *Modern Language Journal*.
Long, M. H. (1980). *Input, interaction and second language acquisition*. Unpublished doctoral dissertation, University of California, Los Angeles.
Long, M. H. (1983a). Linguistic and conversational adjustments to non-native speakers. *Studies in Second Language Acquisition*, *5*, 177–193.
Long, M. H. (1983b). Native speaker/non-native speaker conversation and the negotiation of comprehensible input. *Applied Linguistics*, *4*, 126–141.
Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of research on language acquisition: Vol. 2. Second language acquisition* (pp. 413–468). San Diego, CA: Academic Press.
Long, M. H., Inagaki, S., & Ortega, L. (1998). The role of implicit negative feedback in SLA: Models and recasts in Japanese and Spanish. *Modern Language Journal*, *82*, 357–371.
Loschky, L. (1994). Comprehensible input and second language acquisition: What is the relationship? *Studies in Second Language Acquisition*, *16*, 303–323.
Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition*, *19*, 37–66.
Mackey, A. (1999). Input, interaction, and second language development: An empirical study of question formation in ESL. *Studies in Second Language Acquisition*, *21*, 557–587.
Mackey, A., & Oliver, R. (2002). Interactional feedback and children's L2 development. *System*, *30*, 459–477.
Mackey, A., Oliver, R., & Leeman, J. (2003). Interactional input and the incorporation of feedback: An exploration of NS-NNS and NNS-NNS adult and child dyads. *Language Learning*, *53*, 35–66.
Mackey, A., & Philp, J. (1998). Conversational interaction and second language development: Recasts, responses, and red herrings? *Modern Language Journal*, *82*, 338–356.
Mackey, A., & Silver, R. E. (2005). Interactional tasks and English L2 learning by immigrant children in Singapore. *System*, *33*, 239–260.
McDonough, K. (2005). Identifying the contributions of negative feedback and learners' responses to L2 development. *Studies in Second Language Acquisition*, *27*, 79–103.
Morris, F. (2002). Negotiation moves and recasts in relation to error types and learner repair in the foreign language classroom. *Foreign Language Annals*, *35*, 395–404.
Muranoi, H. (2000). Focus on form through interaction enhancement: Integrating formal instruction into a communicative task in EFL classrooms. *Language Learning*, *50*, 617–673.
Ohta, A. S. (2000). Rethinking interaction in SLA: Developmentally appropriate assistance in the zone of proximal development and the acquisition of L2 grammar. In J. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 51–78). Oxford: Oxford University Press.
Oliver, R. (1995). Negative feedback in child NS-NNS conversation. *Studies in Second Language Acquisition*, *17*, 459–481.
Oliver, R. (1998). Negotiation of meaning in child interactions. *Modern Language Journal*, *82*, 372–386.
Oliver, R. (2000). Age differences in negotiation and feedback in classroom and pairwork. *Language Learning*, *50*, 119–151.
Oliver, R. (2002). The patterns of negotiation for meaning in child interactions. *Modern Language Journal*, *86*, 97–111.
Philp, J. (2003). Constraints on 'noticing the gap': Nonnative speakers' noticing of recasts in NS-NNS interaction. *Studies in Second Language Acquisition*, *25*, 99–126.
Pica, T. (1987). Second language acquisition, social interaction, and the classroom. *Applied Linguistics*, *8*, 3–21.
Pica, T. (1988). Interlanguage adjustments as an outcome of NS-NNS negotiated interaction. *Language Learning*, *38*, 45–73.
Pica, T., Holliday, L., Lewis, N., & Morgenthaler, L. (1989). Comprehensible output as an outcome of linguistic demands on the learner. *Studies in Second Language Acquisition*, *11*, 63–90.
Pica, T., Kanagy, R., & Falodun, J. (1993). Choosing and using communication tasks for second language research and instruction. In G. Crookes & S. M. Gass (Eds.), *Tasks and language learning: Integrating theory and practice*. Clevedon, UK: Multilingual Matters.

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press

Pica, T., Young, R., & Doughty, C. J. (1987). The impact of interaction on comprehension. *TESOL Quarterly*, *21*, 737–758.
Sheen, Y. (2004). Corrective feedback and learner uptake in communicative classrooms across instructional settings. *Language Teaching Research*, *8*, 263–300.
Shehadeh, A. (1999). Non-native speakers' production of modified comprehensible output and second language learning. *Language Learning*, *49*, 627–675.
Shehadeh, A. (2001). Self and other-initiated modified output during task-based interaction. *TESOL Quarterly*, *35*, 433–457.
Silver, R. E. (2000). Input, output, and negotiation: Conditions for second language development. In B. Swierzbin, F. Morris, M. E. Anderson, C. A. Klee, & E. Tarone (Eds.), *Social and cognitive factors in second language acquisition: Selected proceedings of the 1999 Second Language Research Forum* (pp. 345–371). Somerville, MA: Cascadilla Press.
Storch, N. (2002). Patterns of interaction in ESL pair work. *Language Learning*, *52*, 119–158.
Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. M. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Rowley, MA: Newbury House.
Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics: Studies in honour of H. G. Widdowson* (pp. 125–144). Oxford: Oxford University Press.
Swain, M. (2005). The output hypothesis: Theory and research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 471–483). Mahwah, NJ: Erlbaum.
Thomas, M. (2005). Theories of second language acquisition: Three sides, three angles, three points. *Second Language Research*, *21*, 393–414.
VanPatten, B. & Williams, J. (in press). Introduction. In B. VanPatten & J. Williams (Eds.), *Theories in SLA*. Mahwah, NJ: Erlbaum.
Varonis, E., & Gass, S. M. (1985). Non-native/non-native conversations: A model for negotiation of meaning. *Applied Linguistics*, *6*, 71–90.
Wagner-Gough, J., & Hatch, E. (1975). The importance of input data in second language acquisition studies. *Language Learning*, *25*, 297–308.

https://doi.org/10.1017/S0272263106060086 Published online by Cambridge University Press