

other forms of enhanced input (Sharwood Smith 1991) designed to focus attention to form in context of communication (Lightbown 1992). A number of studies have shown that these instructed features facilitated learning for: *-ing* and adjective-noun order (Lightbown & Spada 1990); adverb placement (White 1991); dative alternation (Carroll & Swain 1993); conditional (Day & Shapson 1991); questions (White, Spada, Lightbown & Ranta 1990); *passé composé* vs. *imparfait* (Harley 1989); and overall grammar (Montgomery & Eisenstein 1986; Spada 1987). In many cases, learners retained the instructed item after their instructional period was over.

Studies that focused on specific features of instruction have revealed significant results in several areas. Thus, research has shown that instruction to attend to form facilitated learning of word order (Hulstijn & Hulstijn 1984) and overall grammar (Spada 1987) for L2 learners. It has also been found that message encoding in L2 forms and structures for which the learner was developmentally ready facilitated the learning of word order and constituent movement (Ellis 1989, Pienemann 1984, 1988); as well as question formation (Mackey 1995). Furthermore, message encoding in L2 structures marked hierarchically, in this case through the relative clause accessibility hierarchy, facilitated the learning and generalizability of relative clauses formation throughout the hierarchy (Doughty 1991; Eckman et al. 1988; Gass 1982). So instruction is making a difference, as Long told us that it would, and instructional interaction is what seems to be quite effective in these cases.

A variation on instructional intervention is garden path interaction, in which learners are given instruction on the rules for production of a regular form which misleads them to overgeneralize the rule to a context where they should use an irregular form. For example, learners might say *drinked* after having been instructed on the *past regular*. This error would provide a basis for the teacher to introduce learners to the *past irregular*. Garden path interaction appears to help learners make cognitive comparisons between their interlanguage and the L2 and to heighten their awareness of rules, regularities, and exceptions that may be difficult to access. In their research, Tomassello and Herron (1988, 1989) have shown that learners who are led down the garden path to first misgeneralize the rules for regular forms and who then are taught exceptions were better able to internalize these irregular forms than those learners who were taught the rules and patterns at the same time.

As was evident throughout the excerpts above, both NS and learner interlocutors can contribute to the cognitive and social processes of L2 learning, and thereby supply data for L2 learning. Their common, as well as unique, contributions are as follows: First, learners are given more modified L2 data from native speakers than from other learners. Thus, in Pica et al. (1989), Pica (1992, 1994), and Pica et al. (1995), it was found that, when engaged in communication tasks, NSs responded to learner signals about utterances that were difficult to understand by modifying those initial ut-

terances 73 percent of the time. Learners, on the other hand, responded to NS signals with only 54 percent modification. This pattern also held for learner responses to other learners, with 51 percent modification observed in learner to learner discourse. NSs seem to modify their prior utterances in response to learner signals in this way regardless of signal type. However, learners modify prior utterances mainly in response to signals that are open questions or clarification requests. This signal-response pattern was revealed in excerpts 1 and 2. In these sections, NSs modified their initial utterances regardless of learner signal. This pattern is quite different from that revealed in excerpts 15-18. Here, the use of modification in the learner's response appeared to be a function of whether or not the signal was a clarification request or an open question, (see Pica et al. 1989, Pica 1994, Pica et al. 1995). Thus, in excerpt 15 the signal *what?* drew a modified response from the learner. The same modification occurred with Sato's signal *light? what? excuse me?* to Shiro in excerpt 16.

Excerpt 15

Learner
they are think about the fun thing so they
are change the position each other
they change up the position so they
think father went to a preschool and son
went to the company OK

NS Researcher

what?

(Linnell 1995: 269)

Excerpt 16

Shiro
and one picture another picture is two
one woman one man sitting on the sofa
and the man light his cigarette
another picture is sitting on sofa and are
sitting on sofa and the man light on his
cigarette

Sato

light? what? excuse me?

(Linnell 1995: 269)

This was different from the interaction found in excerpt 17. Here, Mike's modified signals of *on the front?* and *in the front of the door? there is a small step, yes.* drew forth only a variant of *yes* from Masa. In excerpt 18, Katamachi's signal, *she has match?* drew forth only *yes?* from Mitsuo.

Excerpt 17

Masa
I think on the front is a small stone
yeah oh doors
yeah
oh yes

Mike
on the front?
in the front of the door?
there is a small step, yes.

(Pica, et al. 1996)

Excerpt 18

Katamachi

she has match?

my picture has a - she is try to turn s—
how do you say on the gas

Mitsuo

my picture she has match

yes

(Pica, et al. 1996)

Comparing excerpts 1 and 2, with 19 and 20 illustrates how learners are given more directed and diversified L2 data from NSs than from other learners. As shown in excerpts 1 and 2, NS modifications in responses to learner signals are tied to learner signals through segmentation, relocation, and definition of previous utterances about which the learner has signaled. However, as seen in 19 and 20, learner modifications in response to signals are often repetitions of their prior utterances or add new information, relevant to what is being talked about but not directly linked to the signal. Thus, in excerpt 19, Kata supplied information about the *simple* appearance of his house even though Mitsuo's signal about the house was more concerned with its size. In 20, Kata elaborated about the *way* of his house, even though Mitsuo's signal was about the *door and windows* of the house.

Excerpt 19

Kata

and in the right side of the tree

I have a house a big house

my house have it's a big but er simple

Mitsuo

right side

a big house?

Ok

(Pica, et al. 1996)

Excerpt 20

Kata

I have a door and two windows like

a house that everyone draws and

with a way

a door and two windows and a way

I have a door and a way for people

who can pass

Mitsuo

there is a door

and two windows?

(Pica, et al. 1996)

As these excerpts also illustrate, learners are given more diversified L2 data from NSs than from other learners. This probably occurs because the learners have fewer linguistic resources for modification than do the NSs, both in their production of modified output and as providers of modified

input. Although this capacity of the NSs makes them strong providers of input and feedback, it may also limit the learner's communicative needs, as all of the repetitions, segmentations, expansions, and recasts that native speakers make of learner utterances tend to block learner production of output. This is not surprising given that once learners hear a native model, they have nothing else to say in their responses but *yes, that's what I meant to say?* (Oliver 1995, Pica et al. 1989, Pica 1994, Pica et al. 1995), unless, of course, they had been trying to say something else, in which case they might modify their output. The question then remains: what data are learners good at providing?

In general, during negotiation, the modification that learners make in response to learner signals provide two types of data. For the responding learner, there is interlanguage data on that learner's own potential to manipulate and modify current interlanguage, and for the signaling learner, there is input data to serve the other's interlanguage construction and L2 learning. Both of these data can be seen in excerpt 3. This a clear example of the learner's attempt to modify output lexically and morphosyntactically. In so doing, however, Ichi may have provided a context for his own coordination of modified output; however, he did not supply the best model of L2 input for the other learner. Another contribution of learners as interlocutors is found among learner signals to each other. Those signals that are segmentations of prior utterances are generally quite consistent with standard L2 grammar. This can be seen above in excerpts 3, 7, 10 and here in 19 and 20. This is good news, as segmentation constitutes the major signal type among the learners thus far in our research. (see Pica 1992, 1994).

Finally, as had been shown in excerpt 14, and as illustrated in excerpt 21 as well, learners are effective in working together through scaffolding and completion to supply each other with words and phrases needed for message meaning. NSs do this too, but they often complete learner messages with a target version or model of what the learner has already said rather than supply new or missing words for them. This can be seen in excerpt 21. Here, Paul recasted Seiji's *she forget she with about the stove* but this as the more appropriate *she forgets about the stove*.

Excerpt 21

Seiji
and er she she talked er on the phone
long time
she she forget er about the the stove

she forget she
yes

Paul

oh
*ah she talks er erm
after that she forgets
about the stove*

(Pica, et al. 1996)

The comparison of NSs and learners as resources for L2 learning is not a new direction in the study of language learning through interaction. Earlier incarnations include studies on group work vs. teacher-fronted interaction (Pica & Doughty 1985a, b; Doughty & Pica 1986), and negotiation among learners vs. between native speakers and learners (Gass & Varonis 1985b, 1986). However, these studies were conducted within the theoretical contexts of their time, at a time when researchers counted instances of negotiation and drew inferences about language learning from them. More is now known about learners' needs to access the different kinds of data that assist L2 acquisition, and the need to engage in the cognitive and social processes that offer access to such data.

As researchers take account of the multiple kinds of data needed for different aspects of the learning process and of the different psycholinguistic and social processes involved in accessing these data, they are generating an increasing number of studies that relate to the interaction among these processes. A great deal of new research has emerged on "language learning through interaction" with respect to the different cognitive, psycholinguistic, and social processes described in this article. It is well-conceived, well designed research, with considerable application to the classroom.

Researchers are looking at relationships between types of interaction and learner productions therein. They are looking at feedback, other kinds of input to learners, and the impact these have on learners' responses in the short and long term. Throughout, references have been made to some of the young researchers who are conducting work on language learning through interaction, in one or all of the ways I have noted in this article. Among the new names on the research horizon are Julian Linnell for his recent work on interaction and interlanguage syntacticization (Linnell 1995). Also noted are Rhoda Oliver (1995) for her study of children's interaction, the impact of interaction on the availability of feedback, and the effect this feedback had on their production of modified output (Oliver 1995); Alison Mackey for her work on the impact of negotiation on accelerating learners through developmental stages of L2 learning (Mackey 1995); and Anna Assis, and Peter Robinson for their studies on communication tasks and language learning (Assis 1995; Robinson 1995).

These and other junior researchers, along with those who are already highly established, are ushering a new phase of research on language learning through interaction. It is a time when leading researchers such as Gass, Long, Lightbown, and Swain are forging new lines of research on the relationship between feedback and language learning (see Long in press, Lightbown 1994; Swain 1994). Swain has also subjected her own construct of comprehensible output to research on collaborative discourse. (see Swain 1994), and Lightbown has directed a series of experimental studies on classroom interaction and SLA, with collaborators Spada, White, and Ranta (see White, Spada, Lightbown, & Ranta 1991). The point to be made in closing

is that the field of SLA has come a long way from looking at interaction and L2 learning from the perspective of social interaction alone. Now that many of the more cognitive constructs of L2 learning have been operationalized, they too can be studied within an interactionist perspective and implemented with these social dimensions.

What this all means is that researchers no longer simply study features of social interaction but examine the interactions among these features, as they question how they affect the learning needs and processes of language learners. If there were a time in the past when this line of research seemed to be at standstill, simply counting instances of interaction (see Ellis 1991), that time has passed. With new, operationalized variables and multiple perspectives for examining them, there is much work to be done.

References

- Alijaafreh, A., & Lantolf, J. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal*, 78, 465-483.
- Assis, A. A. (1995). Peers as a resource for language learning in the foreign language context: Insights from an interaction-based study. Unpublished doctoral dissertation. Philadelphia: University of Pennsylvania.
- Carroll, S., & Swain, M. (1993). Explicit and implicit negative feedback: An empirical study of the learning of linguistic generalizations. *Studies in Second Language Acquisition*, 15, 357-386.
- Chaudron, C. (1977). A descriptive model of discourse in the corrective treatment of learners' errors. *Language Learning*, 27 (1), 29-46.
- Chaudron, C., & Parker, K. (1990). Discourse markedness and structural markedness: The acquisition of English noun phrases. *Studies in Second Language Acquisition*, 12, 43-64.
- Crookes, G. (1989). Planning and interlanguage variability. *Studies in Second Language Acquisition*, 11, 367-83.
- Day, R. (Ed.). (1986). *Talking to learn*. Rowley, MA: Newbury House.
- Day, E. M., & Shapson, S. M. (1991). Integrating formal and functional approaches to language teaching in French immersion: An experimental study. *Language Learning*, 41 (1), 25-58.
- Doughty, C. (1991). Second language instruction does make a difference: Evidence from an empirical study of second language relativization. *Studies in Second Language Acquisition*, 13 (4), 431-469.
- Doughty, C., & Pica, T. (1986). Information gap tasks: An aid to second language acquisition? *TESOL Quarterly*, 20, 305-325.
- Eckman, F., Bell, L., & Nelson, D. (1988). On the generalization of relative clause instruction in the acquisition of English as a second language. *Applied Linguistics*, 9, 1-20.
- Ellis, R. (1985). Teacher-pupil interaction in second language development. In S. Gass & C.G. Madden (Eds.), *Input and second language acquisition* (pp. 69-85). Rowley, MA: Newbury House.
- Ellis, R. (1987). Interlanguage variability in narrative discourse: Style-shifting in the use of past tense. *Studies in Second Language Acquisition*, 9, 1-20.

- Ellis, R. (1989). Are classroom and naturalistic acquisition the same? A study of the classroom acquisition of German word order rules. *Studies in Second Language Acquisition*, 11 (3), 305-328.
- Ellis, R. (1991). *The interaction hypothesis: A critical evaluation*. Paper presented at the RELC conference, Singapore.
- Gass, S. (1982). From theory to practice. In M. Hines & W. Rutherford (Eds.), *On TESOL '81*. (pp.129-139). Washington, DC: TESOL.
- Gass, S. (1988). Integrating research areas: A framework for second language studies. *Applied Linguistics*, 9, 198-217.
- Gass, S., & Selinker, L. (1994). *Second language acquisition: An introductory course*. Hillsdale, NJ: Lawrence Erlbaum.
- Gass, S., & Varonis, E. M. (1985a). Task variation and non-native/non-native negotiation of meaning. In S. Gass & C. G. Madden (Eds.), *Input and second language acquisition* (pp. 149-161). Rowley, MA: Newbury House.
- Gass, S., & Varonis, E. M. (1985b). Variation in native speaker speech modification to non-native speakers. *Studies in Second language Acquisition*, 7, 37-58.
- Gass, S., & Varonis, E. M. (1986). Sex differences in NNS/NNS interactions. In R. Day (Ed.), *Talking to learn*. Rowley, MA: Newbury House.
- Gass, S., & Varonis, E. M. (1989). Incorporated repairs in NNS discourse. In M. Eisenstein & E. Hatch (Eds.) (1978), *Acquisition of syntax in a second language*. In J. Richards (Ed.), *Understanding second and foreign language learning: Issues and approaches*. Rowley, MA: Newbury House.
- Gass, S., & Varonis, E. M. (1994). Input, interaction, and second language production. *Studies in Second Language Acquisition*, 16, 283-302.
- Genesee, F. (1987). *Learning through two languages: Studies of immersion and bilingual education*. Cambridge, MA: Newbury House.
- Givón, T. (1984). Universals of discourse structure and second language acquisition. In W. Rutherford (Ed.), *Topological universals and second language acquisition*. Amsterdam: John Benjamins.
- Harley, B. (1989). Functional grammar in French immersion: A classroom experiment. *Applied Linguistics*, 10, 331-359.
- Hatch, E. (1978). Acquisition of syntax in a second language. In J. Richards (Ed.), *Understanding second and foreign language learning* (pp. 34-70). Rowley, MA: Newbury House.
- Hatch, E. (1983). *Psycholinguistics: A second language perspective*. Rowley, MA: Newbury House.
- Holliday, L. (1993). NS syntactic modifications in NS-NNS negotiation as input data for second language acquisition of syntax. Unpublished doctoral dissertation. Philadelphia: University of Pennsylvania.
- Holliday, L. (1993). *Negotiation as a source of positive data for acquisition of L2 syntax*. Paper presented at the Second Language Research Forum, Pittsburg, PA.
- Hulstijn, J. (1989). Implicit and incidental second language learning: Experiments in the processing of natural and partly artificial input. In Dechert & Raupach (Eds.)
- Kelch, K. (1985). Modified input as an aid to comprehension. *Studies in Second Language Acquisition*, 7, 81-89.
- Klein, W. (1986). *Second language acquisition*. Cambridge, UK: Cambridge University Press.
- Krashen, S. (1981). *Second language acquisition and second language learning*. Oxford, UK: Pergamon Press.
- Krashen, S. (1983). Newmark's ignorance hypothesis and current second language acquisition theory. In S. Gass & L. Selinker (Eds.), *Language transfer in language learning* (pp. 135-156). Rowley, MA: Newbury House.

- Krashen, S. (1985). *The input hypothesis: Issues and implications*. London: Longman.
- Larsen-Freeman, D., & Long, M. H. (1991). *An introduction to second language acquisition research*. London: Longman.
- Lightbown, P. (1983). Exploring relationships between developmental and instructional sequences in L2 acquisition. In H. Seliger & M. Long (Eds.), *Classroom-oriented research in second language acquisition* (pp. 217-243). Rowley, MA: Newbury House.
- Lightbown, P. (1992). Getting quality input in the second/foreign language classroom. In C. Kramsch & S. McConnell-Ginet (Eds.), *Text and context: Cross disciplinary perspectives on language study* (pp. 198-197). New York: Heath.
- Lightbown, P. (1992). Can they do it themselves? A comprehension-based ESL course for young children. In R. Courchene, J. Glidden, J. St. John, & C. Therien (Eds.), *Comprehension-based second language teaching*. Ottawa: University of Ottawa Press.
- Lightbown, P., & Spada, N. (1990). Focus-on-form and corrective feedback in communicative language teaching: Effects on second language learning. *Studies in Second Language Acquisition*, 12, 429-448.
- Lightbown, P., & Spada, N. (1992). Linguistic and conversational adjustments to non-native speakers. *Studies in Second Language Acquisition*, 12, 429-448.
- Lightbown, P., & Spada, N. (1993). *How languages are learned*. Oxford: Oxford University Press.
- Linnell, J. (1995). Negotiation as an aid to syntacticization. Unpublished doctoral dissertation. Philadelphia: University of Pennsylvania.
- Long, M. (1980). *Input, interaction, and conversational adjustments to non-native speakers*. Unpublished doctoral dissertation. Los Angeles: University of California.
- Long, M. (1983). Linguistic and conversational adjustments to non-native speakers. *Studies in Second Language Acquisition*, 5, 177-194.
- Long, M. (1985). Input and second language acquisition theory. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 377-393). Rowley, MA: Newbury House.
- Long, M. (1990). The least a second language acquisition theory needs to explain. *University of Hawaii Working Papers in ESL*, 9, 59-75.
- Long, M. (1991a). The least a theory of second language acquisition needs to explain. *TESOL Quarterly*, 24, 649-666.
- Long, M. (1991b). Focus on form: A design feature in language teaching methodology. In K. de Bot, D. Coste, R. Ginsberg, & C. Kramsch (Eds.), *Foreign language research in cross-cultural perspective* (pp. 39-52). Amsterdam: John Benjamins.
- Long, M. (1995). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of language acquisition* (Vol. 2): *Second language acquisition*. New York: Academic Press.
- Loschky, L. (1994). Comprehensible input and second language acquisition: What's the relationship? *Studies in Second Language Acquisition*, 16, 303-324.
- Mackey, A. (1994). *Using communicative tasks to target grammatical structures. A handbook of tasks and instructions for their use*. Language Acquisition Research Center, University of Sydney, Australia.
- Mackey, A. (1995). Stepping the pace: Input, interaction and second language acquisition. An empirical study of questions in ESL. Unpublished doctoral dissertation. University of Sydney.
- Meisel, J. (1987). Reference to past events and actions in the development of natural second language acquisition. In Pfaff (Ed.), *First and second language acquisition processes*. Cambridge, MA: Newbury House.

- Meisel, J. M., Clahsen, H., & Pienemann, M. (1981). On determining developmental stages in natural second language acquisition. *Studies in Second Language Acquisition*, 3, 109-135.
- Montgomery, C., & Eisenstein, M. (1986). Real reality revisited: An experimental communicative course in ESL. *TESOL Quarterly*, 19, 317-333.
- Oliver, R. (1994). *Negative feedback in child NS/NNS conversation*. Paper presented at the Second Language Research Forum, McGill University, Montreal, October 1994.
- Oliver, R. (1995). Negative feedback in child NS/NNS conversation. *Studies in Second Language Acquisition*.
- Pica, T. (1983). Adult acquisition of English as a second language under different conditions of exposure. *Language Learning*, 33, 465-497.
- Pica, T. (1991). Classroom interaction, participation and comprehension: Redefining relationships. *System*, 19, 437-452.
- Pica, T. (1992). The textual outcomes of native speaker-non-native speaker negotiation. In C. Kramsch & S. McConnell-Ginet (Eds.), *Text and context: Cross-disciplinary perspectives on language study*. Lexington, MA: Heath.
- Pica, T. (1993). Communication with second language learners: What does it reveal about the social and linguistic processes of second language acquisition? In J. Alatis (Ed.), *Language, communication, and social meaning*. (pp. 434-464). Washington, DC: Georgetown University Press.
- Pica, T. (1994). Review article: Research on negotiation: What does it reveal about second language learning conditions, processes, and outcomes? *Language Learning*, 44 (3), 1-35.
- Pica, T., & Doughty, C. (1985a). The role of group work in classroom second language acquisition. *Studies in Second Language Acquisition*, 7, 233-248.
- Pica, T., & Doughty, C. (1985b). Input and interaction in the communicative language classroom: A comparison of teacher-fronted and group activities. In S. M. Gass & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 115-132). Rowley, MA: Newbury House.
- Pica, T. (In press). Do second language learners need negotiation? *International Review of Applied Linguistics*.
- Pica, T., Young, R., & Doughty, C. (1987). The impact of interaction on comprehension. *TESOL Quarterly*, 21, 737-758.
- Pica, T., Holliday, L., Lewis, N., & Morganthaler, L. (1989). Comprehensible output as an outcome of linguistic demands on the learner. *Studies in Second Language Acquisition*, 11, 63-90.
- Pica, T., Holliday, L., Lewis, N., Berducci, D., & Newman, J. (1991). Language learning through interaction: What role does gender play? *Studies in Second Language Acquisition*, 13, 343-376.
- Pica, T., Lincoln-Porter, F., Paninos, D., & Linnell, J. (1995). What can second language learners learn from each other? Only their researcher knows for sure. *Working Papers in Educational Linguistics*, 11 (1), 1-36.
- Pica, T., Lincoln-Porter, F., Paninos, D., & Linnell, J. (1996). Unpublished raw data.
- Pienemann, M. (1984). Psychological constraints on the teachability of languages. *Studies in Second Language Acquisition*, 6, 186-214.
- Pienemann, M. (1989). Is language teachable? Psycholinguistic experiments and hypotheses. *Applied Linguistics*, 10, 52-79.
- Pinker, S. (1989). *Learnability and cognition*. Cambridge, MA: MIT Press.
- Robinson, P. (1995). Task complexity and second language narrative discourse. *Language Learning*, 45 (1), 99-140.
- Rutherford, W., & Sharwood Smith, M. (1985). Consciousness-raising and universal grammar. In W. Rutherford & M. Sharwood Smith (Eds.), *Grammar and second language learning*. Rowley, MA: Newbury House/Harper and Row.

- Schmidt, R., & Frota, S. (1986). Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In R. Day (Ed.), *Talking to learn*. Rowley, MA: Newbury House.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11, 17-46.
- Schmidt, R. (1994). Awareness and second language acquisition. *Annual Review of Applied Linguistics*, 12, 206-226.
- Sharwood Smith, M. (1991). Speaking to many minds: On the relevance of different types of language information for the L2 learner. *Second Language Research*, 7, 118-132.
- Snow, M. A. (1991). Teaching language through content. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 315-328). Boston: Heinle and Heinle.
- Spada, N. (1987). Relationships between instructional differences and learning outcomes: A process-product study of communicative language teaching. *Applied Linguistics*, 8 (1), 137-161.
- Spada, N., & Lightbown, P. (1993). Instruction and the development of questions in L2 classrooms. *Studies in Second Language Acquisition*, 15, 205-224.
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235-256). Rowley, MA: Newbury House.
- Swain, M. (1994). Three functions of output in second language learning. In G. Cool & B. Scidhofer (Eds.), *For H. G. Widdowson: Principles and practice in the study of language. A festschrift on the occasion of his 60th birthday*. Oxford, UK: Oxford University Press.
- Swain, M., & Lapkin, S. (1994). Problems in output and the cognitive processes they generate: A step towards second language learning. Modern Language Centre. Ontario Institute for Studies in Education, Toronto, August 1994.
- Tomasello, M., & Herron, C. (1988). Down the garden path: Inducing and correcting overgeneralization errors in the foreign language classroom. *Applied Psycholinguistics*, 9 (3), 237-246.
- Tomasello, M., & Herron, C. (1989). Feedback for language transfer errors. *Studies in Second Language Acquisition*, 11, 385-395.
- van Patten, B. (1990). Attending to form and content in the input: An experiment in consciousness. *Studies in Second Language Acquisition*, 12, 287-301.
- Varonis, E., & Gass, S. (1985a). Miscommunication in native/non-native conversation. *Language in Society*, 14, 327-343.
- Varonis, E., & Gass, S. (1985b). Non-native/non-native conversations: A model for the negotiation of meaning. *Applied Linguistics*, 6 (1), 71-90.
- White, L. (1991). Adverb placement in second language acquisition: Some effects of positive and negative evidence in the classroom. *Second Language Research*, 7, 133-161.
- White, L., Spada, N., Lightbown, P., & Ranta, L. (1991). Input enhancement and L2 question formation. *Applied Linguistics*, 12, 416-432.

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