

Corrective feedback, over a decade of research since Lyster and Ranta (1997): Where do we stand today?

Victoria Russell (vrussell@mail.usf.edu)

University of South Florida

Abstract

It has been just over a decade since the publication of Lyster and Ranta's critical articles on corrective feedback. Since then, there have been numerous publications in this area of classroom based Second Language Acquisition research. Lyster and Ranta (1997) and Lyster (1998b) found that recasts are the most common, but least effective, form of oral corrective feedback employed by foreign language teachers. Further, Lyster and Ranta concluded that students often fail to notice recasts by confusing them with a repetition or affirmation of their own utterances. This review of literature will explore the research on recasts in the decade following the publication of Lyster and Ranta's seminal articles. The following will serve as guiding questions: 1) Does current research on recasts continue to support Lyster and Ranta's (1997) and Lyster's (1998b) findings? 2) What factors influence the effectiveness of recasts? 3) How do teachers and learners perceive recasts? Current findings indicate that there may be a mismatch in teachers' and students' perceptions of what is considered to be effective feedback on oral errors.

1 Introduction: An historical perspective of error correction

Error correction has a long and controversial history in the fields of Second Language Education (SLA) and Second Language Teacher Education (SLTE). Whether and how to correct errors usually depends upon the methodological perspective to which a teacher ascribes. Historically, the behaviorist teaching models that were practiced in the 1950's and 1960's such as the Audiolingual Method stressed error correction at all costs. Behaviorists viewed errors as inevitable, but strove to avoid and overcome them by providing speedy examples of correct responses. Brooks (1960) wrote, "Like sin, error is to be avoided and its influence overcome … the principal way of overcoming it is to shorten the time lapse between the incorrect response and a presentation once more of the correct model" (p. 56). However, in the 1970's SLA research began to cast doubt upon behaviorist models of instruction and question the value of grammar instruction and error correction in the second language (L2) classroom, largely based on the research findings of naturalistic SLA.

In the 1970s and 1980s, some scholars claimed that error correction was not only unnecessary, but also harmful to SLA. Perhaps the most well known proponent of the "hands off" approach to error correction is Stephen Krashen, whose Monitor Model (1981, 1982) includes five hypotheses about language learning. The Affective Filter Hypothesis states that anxiety can raise a learner's affective filter, which impedes fluency in the L2. In addition, the Natural Order Hypothesis, which is based on Dulay and Burt's (1973, 1974) morpheme order studies, states that learners acquire grammatical forms and structures in a fixed order that cannot be altered by instruction. Terrell (1977, 1982) applied Krashen's hypotheses about SLA to classroom instruction by creating the Natural Approach, a teaching method that emphasizes the development of communicative compe-

tence in the TL over the attainment of grammatical perfection. The Natural Approach prohibits both structured grading and error correction in order to keep students' affective filters low. According to Terrell (1977), affective rather than cognitive factors are of primary concern in the language classroom, and the correction of students' errors is "negative in terms of motivation, attitude, {and} embarrassment" (p. 330). With this method, teachers never present grammar explicitly or correct learners' oral errors; however, it is up to individual learners to study grammar structures outside of class and to correct their own written errors (Omaggio Hadley, 2001).

Communicative Language Teaching (CLT) is a teaching approach that became popular in the 1980's and is still widely employed today. Similar to the Natural Approach, CLT also emphasizes communicative competence and notional-functional concepts over the instruction of grammatical structures (Richards & Rodgers, 1986). With CLT, the goal of instruction is the development of fluency and acceptable language use (Omaggio Hadley, 2001). Since CLT focuses on meaning over form, the correction of grammatical errors is not of primary importance. However, when learners' accuracy is assessed, it is always done in context (Omaggio Hadley, 2001).

In the 1990s, some researchers began to assert that explicit grammar instruction, error correction, and/or a focus on form could promote SLA (Aljaafreh & Lantolf, 1994; Doughty & Varela, 1998; Ellis, 1993, 1994; Fotos, 1994; Long, 1996; Schmidt, 1990, 1993, 1995; Sharwood Smith, 1993). According to Long (1996), negative evidence, or what is not possible in a language, is vitally important for L2 acquisition, especially among adolescent and adult L2 learners. Long (1996) claims that "...environmental contributions to acquisition are mediated by selective attention and the learner's developing L2 processing capacity ... negative feedback obtained in negotiation work or elsewhere may be facilitative of SL development" (p. 414). While negotiating with interlocutors, L2 learners may receive negative feedback in the form of recasts, which are particularly common in L2 classrooms. A recast is when a teacher or other more knowledgeable peer repeats a learner's incorrect utterance, but replaces the error with the correct form. Long posits that when communication in a meaning focused classroom breaks down, negotiation for meaning and recasts can facilitate L2 development precisely at the moment when learners notice the gap (Schmidt & Frota, 1986) between their erroneous production and the correct target language (TL) form.

Lyster (1998b) researched the oral error correction that students receive in immersion classrooms, and found that recasts are "... less successful at drawing learners' attention to their non-target output – at least in content-based classrooms where recasts risk being perceived by young learners as alternative or identical forms" (p. 207). Lyster concluded that recasts are ambiguous to learners because they occur in classroom discourse alongside other types of feedback, such as non-corrective repetitions, which may cause learners to interpret recasts as another way of transmitting the same meaning. In Lyster and Ranta (1997), the researchers examined four French immersion classrooms in Canada and transcribed 18.3 hours of classroom interaction. They examined six types of oral feedback: recasts, elicitation, clarification requests, metalinguistic feedback, explicit correction, and repetition. Lyster and Ranta (1997) define uptake as "a student's utterance that immediately follows the teacher's feedback and that constitutes a reaction in some way to the teacher's intention to draw the learner's attention to some aspect of the student's initial utterance" (p. 49). They examined the six error correction types in order to determine if uptake, with or without repair, took place.

The researchers found that the four teachers made a total of 686 error correction moves during their observations, and of these, recasts accounted for 375 of them. Over half of all four teachers' oral error corrections came in the form of a recast. Students had no uptake for 260 of the 375 recasts, and they demonstrated uptake without repair for 49 of the 375 recasts. A mere 66 recasts resulted in both uptake and repair by students; this number accounts for less than 20% of all recasts given by the teachers. Although recasts appeared to be the most common error correction move employed by teachers, they were found to be the least effective in terms of uptake and repair, with nearly 70% of recasts going unnoticed by the students in Lyster and Ranta's (1997) study.

In his 1998b study, Lyster used the data from Lyster and Ranta (1997) to examine the relationship between error type and feedback type. Lyster (1998b) collapsed the six feedback types used in Lyster and Ranta (1997) into the following three categories: explicit correction, recasts, and the negotiation of form. With Lyster's consolidated classification system, the negotiation of form contains the former categories of elicitation, metalinguistic cues, clarification requests, and repetitions. The researcher was able to distinguish three main categories because both recasts and explicit correction provide the correct form to the learner, the former implicitly and the latter explicitly. Conversely, the negotiation of form does not provide the correct form to the learner, but rather a cue to facilitate learner or peer repair.

Lyster (1998b) found that teachers preferred to use the negotiation of form to correct lexical errors, and recasts to correct phonological and grammatical errors. The researcher also found that the negotiation of form led to greater learner repair for grammatical and lexical errors while recasts led to greater learner repair for phonological errors. Lyster's study also revealed that, in general, teachers had a low tolerance for lexical and phonological errors. Additionally, he found that teachers tended not to correct as many grammatical errors, but when they did, they usually opted to correct them with a recast rather than through the negotiation of form. However, Lyster (1998a, 1998b) asserts that teachers should use the negotiation of form rather than recasts to correct learners' grammatical errors because the negotiation of form pushes learners to produce output (Swain, 1985), which serves as an internal priming device that may prompt learners to notice the gap (Schmidt & Frota, 1986) between their non-target utterances and the correct TL forms. Further, Lyster claims that because grammatical errors are largely unnoticed by students in L2 classrooms, the negotiation of form is an effective error correction technique because it encourages learners to notice and correct their own grammatical mistakes. In another article, Lyster (1998a) discusses the pedagogical implications of his research on corrective feedback, and he suggests that recasts do not lead to learner-generated repair because students perceive them as a confirmation of meaning rather than as a correction.

2 Current research on recasts: Are recasts ambiguous or beneficial to learners?

Following Lyster and Ranta (1997) and Lyster (1998b), research by Panova and Lyster (2002) and Lyster (2004) appear to support the claim that recasts are ambiguous to L2 learners. In his 2004 study, Lyster compared recasts to prompts for the acquisition of grammatical gender in French. Prompts, which were formerly known as the negotiation of form (Lyster, 1998a, 1998b), were defined as instances where students were prompted to use more accurate grammatical forms. Prompts included elicitations, metalinguistic cues, clarification requests, and repetitions where the teacher adjusts intonation to highlight the error. Lyster found that when combined with form-focused instruction, prompts were more effective than recasts for learners' acquisition of rule-based representations of grammatical gender. Similarly, Panova and Lyster (2002) found that students who received prompts achieved greater accuracy in subsequent language processing than those who received recasts. The researchers concluded that the students who received recasts did not demonstrate subsequent gains in their L2 accuracy because they had difficulty noticing their own morphosyntactic errors and because they were uncertain about how to interpret recasts.

Critics of Lyster point out that his studies only take place in immersion classrooms, and that his results have not been obtained in other instructional settings. Several research studies have found that recasts are beneficial for short-term language learning (Ayoun, 2001; Braidi, 2002; Doughty & Varela 1998; Han, 2002; Havranek, 2002; Iwashita, 2003; Leeman, 2003; Mackey & Philp, 1998; Oliver & Mackey, 2003). Han's (2002) study took place in a laboratory setting where she found that intensive recasting increases learners' noticing and development of morphosyntactic features. Iwashita (2003) found that recasts are more salient to L2 learners than other types of positive evidence from native-speaker interactional moves. Positive evidence is defined as linguistic input about what is possible in a language. Iwashita asserts that due to their salience, recasts are more beneficial than positive evidence for short-term L2 development.

Studies by Oliver and Mackey (2003) and Sheen (2004) confirm Lyster and Ranta's (1997) findings that recasts are the most common form of error correction employed by language teachers. However, these researchers found that the discourse context of the foreign language classroom plays an important role in whether or not a recast results in the learner's uptake of the correction.

Oliver and Mackey (2003) found that in explicit language-focused contexts, learners demonstrated uptake of 85% of recasts. Sheen (2004) claims that the instructional setting is also a factor that contributes to whether or not recasts result in learner uptake. The researcher found that the rates for uptake and repair were greater in some contexts than others. For example, she found that learners of English as a Foreign Language (EFL) in Korea and English as a Second Language (ESL) in New Zealand demonstrated greater uptake of recasts than French immersion and ESL learners in Canada even though all four settings ascribed to communicative approaches. Long (2006) asserts that foreign and second language teachers should not reject the use of recasts in their classrooms simply because they have been found to be ambiguous in some immersion classroom settings. Further, Long points out that the immediate uptake of recasts cannot be equated with L2 learning.

Mackey and Philp (1998) share Long's view and argue that immediate uptake is not an appropriate outcome measure in SLA, and may constitute a methodological "red herring." The researchers found that intensive recasting had a positive facilitative effect on the development of morphosyntactic forms among advanced L2 learners. Mackey and Philp were able to demonstrate the positive effect of recasts on short-term L2 development despite the fact that recasts rarely elicited any type of modification or uptake, as defined by Lyster and Ranta (1997), immediately following the recast in their study. They concluded that although recasts do not usually result in immediate uptake and repair, "the immediate response of the learner to recasts may not be a predictor of whether that learner will subsequently make use of the recast" (p. 352). Rather, Mackey and Philp suggest that the content of the recast and the developmental level of the learner are more accurate predictors of subsequent production of the TL form than immediate uptake.

Leeman (2003) describes recasts are complex discourse structures that can serve as both implicit positive and negative evidence. She also claims that recasts have a third function, to enhance the salience of TL forms for learners. Leeman asserts that the juxtaposition of the recast with the learner's ungrammatical utterance may draw attention to the linguistic features that were missing in the learner's utterance but present in the recast. The researcher isolated the components of recasts (negative evidence, positive evidence, and enhanced salience) by comparing groups that received the following treatments: 1) recasts; 2) negative evidence; 3) enhanced salience of positive evidence; and 4) unenhanced positive evidence (control). Recasts were defined as enhanced salience of positive evidence and negative evidence. Leeman's participants were 74 beginning-level undergraduate students of Spanish whose L1 was English, and her targeted form was noun-adjective agreement in Spanish. The treatments consisted of two information gap tasks that required the participants to use noun-adjective agreement in Spanish in order to complete the tasks. The first part of each information gap task required the participants to give directions to the researcher using the targeted grammatical forms. For the recast group, the researcher reformulated participants' utterances that contained ungrammatical noun-adjective agreement in Spanish. Leeman claims that the recasts provided participants with enhanced salience of positive evidence because they were delivered immediately following participants' non-target utterances. For the negative evidence only group, the researcher repeated participants' ungrammatical utterances in order to inform them of the error implicitly, but she did not reformulate their problematic utterances. For the enhanced salience of positive evidence group and the control group, no feedback on errors was provided to participants. In the second part of each information gap task, the participants in each group received directions containing the targeted forms from the researcher. Thus, participants in all groups received positive evidence in this phase of the treatment. However, stress and intonation on targeted forms were used as aural input enhancement for the enhanced salience of positive evidence group. Similarly, the recast group also received aural input enhancement, but only on the adjective endings. Leeman measured learning of targeted forms by administering a pretest, an immediate posttest, and a delayed posttest. She found that only two groups performed significantly better than the control group on the two posttests: the enhanced salience of positive evidence group and the recast group. Since the negative evidence group did not perform significantly better than the control group on any of the posttests, Leeman suggests that the negative evidence component of recasts may not be a critical factor. Further, she asserts that the beneficial effect of recasts is at

least partially derived from the increased salience of positive evidence that they provide to learners.

In summary, the current research is mixed on whether or not recasts are beneficial to learners. Several research studies found that recasts facilitate language learning (Ayoun, 2001; Braidi, 2002; Doughty & Varela, 1998; Han, 2002; Havranek, 2002; Iwashita, 2003; Leeman, 2003; Mackey & Philp, 1998; Oliver & Mackey, 2003); however, these studies have only been able to demonstrate a positive effect on short-term learning. Other studies, especially those carried out by Lyster and his colleagues, have found that recasts are the least effective means of oral error correction. In addition to the debate about whether or not recasts are beneficial, there is also disagreement about the validity of using uptake as an outcome measure in SLA because immediate uptake of a recast does not necessarily equate to L2 learning.

Despite these differing viewpoints, there is general agreement among SLA researchers that recasts are the most common form of oral error correction employed by teachers in second and foreign language classrooms. There is also agreement that recasts are complex discourse structures that can sometimes be difficult for learners to notice. However, Lyster's (1998a, 2004) and Panova and Lyster's (2002) claims that recasts are ambiguous to learners were not supported by research that was conducted in explicit language-focused contexts (Oliver & Mackey, 2003) or in instructional settings other than immersion classrooms (Sheen, 2004). It may be that recasts are ambiguous only within certain contexts and with certain learners, such as those that are not developmentally ready to acquire the TL form as found by Mackey and Philp (1998).

3 Learners' perceptions of recasts and constraints on noticing recasts

In her 2003 study, Philp investigated the factors that mediated learners' noticing of recasts in native-speaker (NS) and nonnative-speaker (NNS) interactions. She found that higher and intermediate level learners were significantly more accurate when recalling recasts than the lower level learners. Recasts of five or fewer morphemes were recalled with greater accuracy than recasts of six or more morphemes. Participants, irrespective of learner level, more consistently noticed shorter recasts. Additionally, Philp found that the recall of recasts was significantly less accurate for all learners (high, intermediate, or low) when there were more than three changes within the recast.

Philp concludes that learners may effectively use recasts when developmental level and feedback correspond. Further, she found that learners did not always notice recasts, and if they noticed them, they often did not notice every detail. Philp suggests that learners' noticing of recasts may have been constrained by the following factors: limitations in working memory, unfamiliar input, multiple corrections, complex changes in the recast, learner level, processing biases of the learner, and grammatical forms in the recast that were beyond the learner's interlanguage (IL) grammar. Therefore a variety of learner variables may account for how students perceive recasts, if they are noticed at all.

3.1 Can learners distinguish recasts from repetitions?

In Lyster's (1998b) study, he concludes that recasts are difficult to notice because learners perceive them as simple repetitions of their own utterances. In communicative-focused classrooms, recasts and repetitions commonly occur alongside other types of interactional feedback, which can be problematic for students' differentiation of recasts from repetitions. In opposition to this view, Long (2006) suggests that recasts might be distinguished from repetitions in classroom discourse contexts by the teacher's paralinguistic cues, such as gesture, tone, and facial expression.

In their 2006 study, Carpenter, Jeon, MacGregor, and Mackey investigated the roles that paralinguistic cues play in the disambiguation of recasts. They targeted recasts, which were defined as "the NS's reformulation of all or part of a problematic learner utterance that corrected the error(s) without changing the central meaning of the utterance," and repetitions, which were defined as "NS utterances that followed and repeated all or part of a learner's targetlike utterance" (p. 218). These definitions were taken from Lyster and Ranta (1997). The researchers hypothesized that participants would be more likely to pick up on paralinguistic cues if recasts could be viewed outside of the discourse contexts in which they occur. In order to tease the recast apart from the discourse context, the researchers used video clips of task-based interactions where teachers were shown giving recasts and repetitions to students. Half of the participants were shown clips that contained recasts as well as the student's non-target utterance that elicited the correction, and the other half were shown clips that contained recasts without the student's initial problematic utterance that triggered the correction. Carpenter et al. (2006) found that participants who did not view the non-target utterance that elicited the recasts were significantly less able to differentiate recasts from repetitions in the video clip. This finding led the researchers to conclude that learners do not look for paralinguistic cues from their teachers to help them disambiguate recasts from repetitions.

3.2 Interactional feedback and learners' perceptions

Mackey, Gass, and McDonough (2000) investigated how learners perceive interactional feedback, and whether learners' perceptions affect their IL development. Students were video taped during task-based dyadic interaction with a NS, and they were subsequently shown video clips of their interactions with their NS interlocutors and asked to introspect about the types of corrective feedback that they received. The researchers found that learners were generally accurate about their perceptions of phonological and lexical feedback; however, learners' perceptions of morphosyntactic feedback were usually confused with feedback about semantics or lexis. The study did not dictate the manner of corrective feedback to be employed by the NSs; rather, the natural flow of conversation between the NS and the participant guided the type of corrective feedback that was selected. Interestingly, all of the corrections fell into the category of implicit negative feedback, which were negotiation, recasts, or a combination of the two. Of note, most NS interlocutors chose recasts to correct students' oral errors. The NSs preferred recasts for correcting students' morphosyntactic errors (75% of recasts corrected errors in morphosyntax), while they only rarely used negotiation for these types of errors (7% of negotiations corrected errors in morphosyntax). Additionally, there were no instances of combining a recast with negotiation when the student's oral error was morphosyntactic in nature.

Mackey, Gass, and McDonough (2000) hypothesize that the greater participatory involvement required of learners during negotiation heightens their noticing of erroneous forms. In contrast, they suggest that recasts may not be noticed because they do not require participation by learners. Further, Mackey et al. found that "there was evidence of learner uptake after feedback for a little over half (52%) of all the feedback provided {and} learners' stimulated-recall reports generally revealed accurate perceptions about feedback for which they had uptake at the time of the interaction" (p. 492). Although using uptake to measure L2 learning has been criticized in the literature on corrective feedback (Long, 2006; Mackey & Philp, 1998), the research by Mackey et al. reveals that learners who demonstrate uptake are also able to accurately perceive the intent of their teacher's correction.

3.3 How do the social dynamics of classrooms affect learners' perceptions?

In addition to the difficulty that learners face when trying to disambiguate recasts from other types of interactional feedback in L2 classrooms, Morris and Tarone (2003) found that the social dynamics of the classroom could also affect learners' perceptions of recasts. The researchers investigated negative social dynamics and interpersonal conflicts among students in L2 classrooms, specifically students working in dyads, to determine if the social dynamics of a classroom could affect learners' perceptions of recasts. Morris and Tarone collected data on the interactional discourse of pairs of students as they engaged in jigsaw tasks. Errors were identified and corrections, if provided by the partner, were classified into one of three types: 1) explicit correction, 2) recast, or 3) negotiation. The conversations were also analyzed for instances of interpersonal conflict such as mockery, expressions of annoyance, and arrogance. The researchers found that "learners' ex-

pectations of being negatively evaluated socially by their partners on occasion led them to perceive mockery when it was not overtly apparent in the discourse data, and when this occurred, they did not acquire the recast form" (p. 344). When interpersonal conflict exists among students in the L2 classroom, learners' tend to perceive recasts as criticism or mockery rather than as error correction.

If the social dynamics between students collaborating during pair work affects learner perceptions of recasts, then it would be reasonable to suggest that the social dynamics between teachers and students could also lead to the misinterpretation of recasts, which Morris and Tarone (2003) found negatively impacts students' uptake of the correction. There is a large gap in the literature regarding the student and teacher dynamic and how this may affect interactional patterns in L2 classrooms. Specifically, there is a lack of research on learners' perceptions of their teachers' intent as they provide oral corrective feedback to their students. A teacher's tone and demeanor as well as other paralinguistic cues may affect, either positively or negatively, how students receive oral error correction. The social dynamics between teachers and students likely affect learners' perceptions of corrective feedback; however, more research is needed in this area before any definitive claims can be made.

4 Teachers' versus students' perceptions of oral error correction

Another important factor in the research on corrective feedback is how students and teachers may differ in their perceptions of oral error correction. There is a limited amount of research on this topic, even though this is an area where SLA research can contribute effectively and usefully to second and foreign language pedagogy. According to Schulz (2001), it is detrimental to learning when students' and teachers' belief systems are at odds. In her 2001 study, Schulz investigated student and teacher perceptions about the instruction of grammar and oral error correction across U.S. and Colombian cultures by administering a survey to 122 Colombian foreign language instructors, 607 Colombian foreign language students, 92 U.S. foreign language instructors, and 824 U.S. foreign language students. She found that Colombian students, in general, expect more grammar instruction and focus on form activities in the FL classroom than their American counterparts. The researcher also found that students from both cultures believed that the teacher is "an expert knower whose role is to explain and provide feedback" (p. 255). Regarding error correction, only 4% of students from both U.S. and Colombian cultures expressed a dislike for having their oral errors corrected during class. Additionally, students from both cultures expressed strong expectations that their teachers should correct their errors, with 97% of U.S. and 98% of Colombian students expressing a preference for their teachers to correct their written work, and 94% of U.S. and 95% of Colombian students expressing a preference for their teachers to correct their oral errors during class.

With respect to teachers' perceptions, Schulz found that there was much less agreement between teachers from the U.S. and Colombian cultures regarding their beliefs about grammar instruction, with Colombian teachers emphasizing the importance of grammar instruction more than their American counterparts. However, both Colombian and U.S. teachers had similar beliefs regarding written and oral error correction. Both groups of teachers strongly agreed that written errors should always be corrected and that students feel cheated if their written errors are not corrected. Conversely, only about half of the teachers surveyed from both cultures believed that oral errors should be corrected in class, which reveals a mismatch between students' and teachers' expectations regarding error correction. While a majority of students from both cultures believed that their teachers should correct their oral errors during class, only 48% of U.S. and Colombian teachers believed that these errors should be corrected.

Schulz attributes teacher beliefs about error correction to three main sources: (1) teacher preparation programs and in-service development; (2) the teacher's own professional experience; and (3) the teacher's own language learning experiences. Based on the findings of her study, Schulz cautions that students may enter the classroom with specific expectations, beliefs, and attitudes, and when these are not met, students' success at learning the foreign language may be hindered. She asserts that it is the teachers' responsibility to ascertain students' beliefs and expectations in

Victoria Russell

order to either help modify what students believe, or to adjust their own instructional practices to meet the students' expectations. The researcher warns that when "teacher behaviors do not mesh with student expectations, learner motivation and a teacher's credibility may be diminished" (p. 256)

Current research by Lasagabaster and Sierra (2005) indicates that there is a mismatch in what students and teachers perceive to be effective oral error correction. The researchers investigated the perceptions of ten teachers and eleven undergraduate students in an EFL context. The participants watched a videotape and were asked to "detect the error-correction moves made by the teacher, classify them, judge their efficiency and record their opinions individually and in groups" (p. 112). The videotape contained a total of 12 error correction moves, but the students detected less than a third of them and, surprisingly, the teachers detected less than half of them. Although teacher-participants detected more oral error corrections than student-participants, a large percentage of the errors went unnoticed by both the teachers and the students in this study.

The student-participants stated that constant correction is not helpful because they feel it inhibits language production; however, they do wish to be corrected by their teachers, but in a more selective way, with teachers focusing on a smaller number of errors in a more explicit way. Students expressed that teachers should devote more time to each correction, and they should also use more strategies and resources when correcting oral errors. Teacher-participants, on the other hand, were more concerned about not over-correcting their pupils for fear of inducing language anxiety. The teachers expressed that it is neither practical nor beneficial to correct each and every error that students commit. Their main desire was to achieve a balance between the gravity of the student's error and allowing sufficient learner talk time.

Lasagabaster and Sierra (2005) argue that teachers need to provide more explicit and direct error correction to their students, especially corrections that learners both notice and understand. Unfortunately, they do not provide any guidelines for teachers on how to achieve clear and comprehensible corrections. There are large gaps in the literature on students' versus teachers' perceptions of error correction. The current research in this area, albeit scant, indicates that there is a mismatch in students' and teachers' belief systems about error correction, with students generally in favor of more corrections, especially corrections that are more explicit, and teachers generally in favor of less oral error correction in order not to impede students' communication in the TL. This mismatch could be harmful to foreign and second language learning; therefore, there is an urgent need for more research into student and teacher beliefs about oral error correction.

5 Where does Lyster stand today?

Another factor that may be harmful to classroom SLA, according to Lyster and Mori (2006), is random and unsystematic feedback on errors. They assert that all oral feedback can be classified into three categories: recasts, prompts, and explicit corrections. Lyster and Mori (2006) posit that recasts and prompts are interactional feedback, as opposed to corrective feedback, because they "are used by teachers in ways that sustain classroom interaction and maintain its coherence, but without consistently fulfilling a corrective function" (p. 272).

In light of the contradictory findings on the benefit of recasts, Lyster and Mori (2006) conducted a study that examined recasts, prompts, and explicit oral error correction in two different instructional settings, French immersion classrooms in Canada and Japanese immersion classrooms in the United States, to determine if learner uptake and repair patterns differ according to instructional setting. The researchers found that recasts were the most common form of oral feedback, followed by prompts and explicit correction in both instructional settings; thus, the teacher behavior in the two instructional settings was similar with regard to recasts being the preferred means of responding to learners' oral errors. Since teacher behavior concerning recasts did not differ, the researchers examined students' responses to recasts to establish if uptake and/or repair took place following the recast.

Lyster and Mori (2006) found that students' responses to recasts were quite different depending upon the instructional setting. In French immersion classrooms in Canada, students usually dem-

onstrated uptake and repair following prompts, but not recasts. Conversely, in Japanese immersion classrooms in the United States, students usually demonstrated uptake and repair following recasts, but not prompts. Lyster and Mori's research revealed that there was a greater emphasis on accurate oral production and repetition in the Japanese immersion classrooms compared to the French immersion classrooms. Another factor that differed between the two instructional settings was the relative distance of the students' first and second languages, with Japanese being more unlike English than French and English, which share similar cognates. Also, French was a second language for the students in the Canadian immersion classrooms, where Japanese was a foreign language for the students in the US immersion classrooms.

Based on their findings, Lyster and Mori (2006) posit the Counterbalance Hypothesis, which states 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 [those] that are congruent with its predominant communicative orientation" (p. 269). In other words, the researchers assert that the Japanese immersion students were more attuned to feedback that is implicit because the teachers in the Japanese immersion classrooms largely used explicit form-focused instruction. Likewise, they suggest that the French immersion students were more attuned to explicit feedback because the teachers in the French immersion classrooms mainly employed meaning-focused instruction. The hypothesis is based on the assumption that a selective shift of the learner's attention away from the primary orientation of the classroom allows for noticing, language awareness, and IL restructuring to occur.

6 Suggestions for future research

Lyster and Mori's (2006) Counterbalance Hypothesis appears to explain the mixed findings of SLA research regarding the benefit of recasts for language learners. Their study examined two distinct discourse contexts and two different languages. In order to validate the researchers' claims, more studies would need to be performed controlling for variables such as TL and learners' proficiency levels across various instructional settings.

In addition to the need to further investigate the Counterbalance Hypothesis, the information that teacher education programs deliver to pre-service teachers regarding how to correct learners' errors is of paramount importance, especially given that the current research on corrective feedback is mixed. Schulz (2001) discusses the importance of teacher education programs and their impact on forming teachers' perceptions of effective error correction. However, there is a need for research on what information is being disseminated to students in teacher education programs about corrective feedback. Some key questions include the following: 1) What information about error correction is included in teacher education programs? 2) Who decides what information to disseminate to students? 3) Is the information that is disseminated to students in teacher education programs on corrective feedback based on current research?

Further, there is a large gap in the literature comparing students' and teachers' perceptions of oral error correction. Lasagabaster and Sierra (2005) found that students desire more explicit corrections than their teachers tend to give. In addition, the researchers found that teachers fear over-correcting their students, yet students desire thorough, but selective, corrections. More research is needed in this area to determine which errors are best to select for oral error correction, and exactly how explicit teachers' corrections should be in order maximize learner uptake and repair.

7 Conclusion

In 1997, Lyster and Ranta revisited the questions asked by Hendrickson (1978):

Should learners' errors be corrected? When should learners' errors be corrected? Which errors should be corrected? How should errors be corrected? Who should do the correcting? Despite the numerous research studies that have been conducted on corrective feedback in the last decade, these questions remain largely unanswered today. Lyster and Mori's (2006) Counterbalance Hypothesis perhaps comes the closest to answering the question "How should errors be corrected?" because the researchers explicitly state that the instructional setting and discourse context of the classroom will dictate the best error correction type for teachers to use. Lyster and Mori advocate using the feedback type that is opposite the communicative orientation of the classroom, which will momentarily shift learners' attention to the error correction. They advise teachers in highly form-focused classrooms to use recasts, and teachers in classrooms that are more meaning-focused to use prompts. However, in order to validate their claims, more research will need to take place to test this hypothesis.

Oral error correction is an area where research can inform and improve practice. In order to assist practicing foreign and second language teachers in a meaningful way, SLA research should attempt to answer Hendrickson's (1978) questions with a combination of qualitative and quantitative studies.

References

- Aljaafreh, A., & Lantolf, J.P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal*, 78(4), 465–483.
- Ayoun, D. (2001). The role of negative and positive feedback in the second language acquisition of the passé compose and the imparfait. *The Modern Language Journal*, 85(2), 226–243.
- Braidi, S.M. (2002). Reexamining the role of recasts in native-speaker/nonnative-speaker interactions. *Language Learning*, 52(1), 1–42.
- Brooks, N. (1960). Language and language learning: Theory and practice. New York: Harcourt, Brace and World.

Carpenter, H., Jeon, K.S., MacGregor, D., & Mackey, A. (2006). Learners' interpretations of recasts. *Studies in Second Language Acquisition*, 28(2), 209–236.

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

Dulay, H.C., & Burt, M.K. (1973). Should we teach children syntax? Language Learning, 23(2), 245-258.

- Dulay, H. C., & Burt, M. K. (1974). Natural sequences in child second language acquisition. Language learning, 24(1), 37–53.
- Ellis, R. (1993). The structural syllabus and second language acquisition. TESOL Quarterly, 27, 91-113.

Ellis, R. (1994). The study of second language acquisition. New York: Oxford University Press.

- Fotos, S.S. (1994). Integrating grammar instruction and communicative language use through grammar consciousness-raising tasks. *TESOL Quarterly*, 28(2), 323–351.
- Han, Z. (2002). A study of the impact of recasts on tense consistency in L2 output. *TESOL Quarterly*, 36(4), 543–572.
- Havranek, G (2002). When is corrective feedback most likely to succeed? International Journal of Educational Research, 37(3–4), 255–270.
- Hendrickson, J. (1978). Error correction in foreign language teaching: Recent theory, research, and practice. Modern Language Journal, 62, 387–398.
- Iwashita, N. (2003). Negative feedback and positive evidence in task-based interaction: Differential effects on L2 development. *Studies in Second Language Acquisition*, 25(1), 1–36.
- Krashen, S. (1981). The "fundamental pedagogical principle" in second language teaching. *Studia Linguistica*, 35(1–2), 50–70.
- Krashen, S. (1982). Principles and practice in second language acquisition. Oxford: Pergamon.
- Lasagabaster, D., & Sierra, J.M. (2005). Error correction: Students' versus teachers' perceptions. *Language Awareness*, 14(2–3), 112–127.
- Leeman, J. (2003). Recasts and second language development: Beyond negative evidence. *Studies in Second Language Acquisition*, 25(1), 37–63.
- Long, M.H. (1996). The role of the linguistic environment in second language acquisition. In W.C. Ritchie & T.K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). San Diego, CA: Academic Press.
- Long, M.H. (2006). Problems in SLA. Mahwah, NJ: Lawrence Erlbaum.
- Lyster, R. (1998a). Form in immersion classroom discourse: In or out of focus? *Canadian Journal of Applied Linguistics/Revue Canadianne De Linguistique Appliquee*, 1(1–2), 53–82.

- Lyster, R. (1998b). Negotiation of form, recasts, and explicit correction in relation to error types and learner repair in immersion classrooms. *Language Learning*, *48*(2), 183–218.
- Lyster, R. (2004). Differential effects of prompts and recasts in form-focused instruction. *Studies in Second Language Acquisition*, 26(3), 399–432.
- Lyster, R., & Mori, H. (2006). Interactional feedback and instructional counterbalance. *Studies in Second Language Acquisition*, 28(2), 269–300.
- Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition*, 19(1), 37–66.
- Mackey, A., Gass, S., & McDonough, K. (2000). How do learners perceive interactional feedback? *Studies in Second Language Acquisition*, 22(4), 471–497.
- Mackey, A., & Philp, J. (1998). Conversational interaction and second language development: Recasts, responses, and red herrings? *The Modern Language Journal*, 82(3), 338–356.
- Morris, F. A., & Tarone, E. E. (2003). Impact of classroom dynamics on the effectiveness of recasts in second language acquisition. *Language Learning*, 53(2), 325–368.
- Oliver, R., & Mackey, A. (2003). Interactional context and feedback in child ESL classrooms. *The Modern Language Journal*, 87(4), 519–533.
- Omaggio-Hadley, A. (2001). Teaching Language in Context (third edition). Boston: Heinle & Heinle.
- Panova, I., & Lyster, R. (2002). Patterns of corrective feedback and uptake in an adult ESL classroom. *TESOL Quarterly*, 36(4), 573–595.
- Philp, J. (2003). Constraints on "noticing the gap": Nonnative speakers' noticing of recasts in NS-NNS interaction. Studies in Second Language Acquisition, 25(1), 99–126.
- Richards, J. C., & Rodgers, T.S. (1986). Approaches and methods in language teaching: A description and analysis. Cambridge: Cambridge University Press.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158.
- Schmidt, R. (1993). Awareness and second language acquisition. *Annual Review of Applied Linguistics*, 13, 206–226.
- Schmidt, R. (1995). Consciousness and foreign language learning: A tutorial on the role of attention and awareness in learning. In R.W. Schmidt (Ed.), *Attention and awareness in foreign language learning* (pp. 1–63). Honolulu, HI: University of Hawai'i, Second Language Teaching and Curriculum Center.
- Schmidt, R., & Frota, S. (1986). Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In R.R. Day (Ed.) *Talking to learn: Conversation in second language* acquisition (pp. 237–326). Rowley, MA: Newberry.
- Schulz, R. A. (2001). Cultural differences in student and teacher perceptions concerning the role of grammar instruction and corrective feedback: USA-Colombia. *The Modern Language Journal*, 85(2), 244–258.
- Sharwood Smith, M. (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition*, 27, 165–179.
- Sheen, Y. (2004). Corrective feedback and learner uptake in communicative classrooms across instructional settings. *Language Teaching Research*, 8(3), 263–300.
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass, & C. Madden (Eds.), *Input and second language acquisition* (pp. 235–256). Rowley, MA: Newbury House.
- Terrell, T. (1977). A natural approach to second language acquisition and learning. *The Modern Language Journal*, 61, 325–337.
- Terrell, T. (1982). The natural approach to language teaching: An update. *The Modern Language Journal*, 66, 121–132.