

Teaching and Researching Nonverbal Communication Skills: Theory- and Research-Based Practices

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1. Introduction

It is highly unlikely that a chapter on the nonverbal dimension in language research and teaching will be found in conventional texts on the learning and teaching of additional languages. In fact, readers might be asking themselves, “Why should what a speaker does with his or her hands even interest me?” The answer, simply put, is because nonverbal behavior has a substantial impact on teachers’ and learners’ ability to communicate in, express emotion through, and cognitively process languages. Like the other skills and dispositions addressed in this anthology, theory and research provide evidence and means by which communication in an additional language can be improved, and in the case of this chapter, through increasing awareness of non/paraverbal (nonverbal + paraverbal) cues through focused attention, recognition, and understanding. However, unlike the other linguistic competences covered in this volume, very little research has been done in the non/paraverbal domain, so this chapter is meant to convince researchers and practitioners of its importance in language learning and teaching – particularly in intercultural interactions – and to prompt investigators to include the entirety of communication channels in their research agendas and to encourage teachers to award it a place of prominence in their classrooms.

Three distinct yet tightly entwined channels interact in communication: Verbal/linguistic, paraverbal/paralinguistic, and nonverbal/nonlinguistic. Language, or the verbal/linguistic channel, consists of spoken words and addresses features like morphology and syntax. Paraverbal cues, often categorized under the nonverbal umbrella, involve any sort of nonword vocalizations that accentuate language, like applying stress, lowering or raising volume or pitch, varying intonation and making sound effects that provide additional meaning to words and utterances. Finally, the nonverbal channel contains movements that can occur simultaneously

with language and paralanguage, including posture, gestures, gaze, facial expression, and elements such as space and touch. A necessary point to highlight for the purposes of our definition is that nonverbal *behavior* and nonverbal *communication* are not necessarily synonymous. According to Richmond, McCroskey, and Hickson (2012), nonverbal behavior becomes communication “if another person interprets it as a message and attributes meaning” (p. 6). For example, what does extending an arm above the head in a stretching motion mean? If it is done to relieve a muscle cramp, it is not communicating anything because there is no meaning being communicated to another person. But if the raised hand is in response to a teacher’s question, symbolizing a willingness to volunteer the answer, then the raised arm would be nonverbally communicating something meaningful. Whereas some nonverbal experts restrict their definition of communication to an exchange of meaning between people, we agree with those who widen those parameters to include the *intrapersonal* function of nonverbal behavior. For example, the nonverbal movements accompanying “private speech” or internal mental processes are considered self-directed communication, as when a language learner incorporates gestures into learning new vocabulary as a way to enhance retention and subsequent retrieval. This broader definition permits us to discuss the full array of communicative, affective, and cognitive functions of nonlinguistic and paralinguistic codes that language teachers and learners can capitalize on to increase communicative, affective, and cognitive competence.

Learning an additional language inherently necessitates communication across cultural boundaries and involves a complex exchange of information, ideas, beliefs, concepts, and even feelings and emotions among people (Matsumoto, LeRoux, Bernhard, & Gray, 2004). How we assign meaning (decode) to the behaviors of others and respond (encode) to it is the essence of communication. We can deliberately engage in verbal conversation by adding to it some form of

non/paraverbal signals as when we use gesture to accompany the rising intonation of our words, but we also frequently communicate unintentionally via an array of nonverbal cues such as body posture and facial expressions that do much to convey our emotions. In the speaker's role, for learners attempting to use their additional language to make themselves understood, the formation of their verbal message requires understanding the rules governing vocabulary, syntax, grammar, and pragmatics of their particular additional language, as well as recognizing the non/paraverbal options at their disposal to express their thoughts and emotions coherently and appropriately. As listeners, interpreting speakers' messages begins with the receipt of multidimensional communication signals, including specific words and non/paraverbal behaviors, and then translating these into meaningful messages. Hence, if communication breakdowns do occur, they may be due to linguistic, paralinguistic, or nonlinguistic misinterpretations with the potential "foreignness" of the dissimilar culture exacerbating the process.

2. Theories on Nonverbal Communication and Their Implications for Learning Additional Languages

Research focusing on the nonverbal dimensions of language learning and teaching is scarce. Although some codes such as gesture and prosody have received a modest amount of attention, almost nothing is available in applied linguistics concerning the many other nonverbal codes such as facial expression, eye behavior, and posture. Likewise, little has been observed in terms of learner emotion. Because of the research blind spot that such a pattern creates, this chapter is necessarily cross-disciplinary, venturing into communication studies (where nonverbal communication research has flourished for decades) and psychology (where emotion and

cognition are regularly studied). When possible, we incorporate the available research from applied linguistics and language pedagogy, mostly in gesture and prosody.

In the next section, we begin by laying a theoretical foundation that substantiates the inextricable links among the verbal, paraverbal, and nonverbal channels of communication. Subsequently, we provide evidence of the communicative, affective, and cognitive benefits that awareness, recognition, and understanding of nonverbal behavior provide to learners of additional languages.

2.1 The Communication Triad: Links among the Verbal, Paraverbal, and Nonverbal

Vygotsky (1987, p. 114) said that “contemplating the body apart from the mind is like attempting to separate the heat from the sun.” This simile cautions us against concentrating pedagogical interest on language alone at the expense of non/paralinguistic channels, which may result in an essential portion of the communication process going unnoticed by learners. Building an integrated understanding of verbal, paraverbal, and nonverbal communication creates scaffolds that enhance the coding and decoding of target language (TL) utterances, promote authentic and appropriate expression and interpretation of affect, and enrich learning. In face-to-face interaction, the various channels are seamlessly connected. It takes special effort to separate meaning into different channels because the verbal, nonverbal, and paraverbal messages interact continuously, becoming one communicative event (DeVito & Hecht, 1990). According to Arndt and Janney (1987, p. 92), “the idea that there are clear boundaries between verbal and nonverbal communication and that it is possible to distinguish sharply between linguistic and nonlinguistic features of conversational events is rooted more in our own logical and methodological assumptions than in the psychological realities of face-to-face communication.” They suggest

that people create meaning from the entirety of the triadic communicative event, rather than adding them up as isolated signs.

The relationship among the three channels of communication is a highly complex, inextricable whole facilitating interpersonal meaning-making, conveying feelings and attitudes, and enhancing thinking and learning – often simultaneously. A holistic perspective permits learners to instantly journey the entire “inter-” to “intra-” personal communication continuum as their bodies, voices, and words externalize their private understanding of an idea for another person, aid in developing this understanding, and transmit their feelings in real time. In the three sections that follow, we provide specific examples of how words, embodiment, and prosody work together to create potential advantages for language learners when awareness of the triad is built into pedagogy.

2.2 The Benefits of Communication Triad Awareness

Language learning success often used to be measured by the accuracy of learners’ utterances, with limited attention paid to saying the right thing at the proper time to the appropriate people. As language teaching methods became more communicative, focus shifted from grammaticality toward sociolinguistic, strategic, and discourse competencies. In assessing developing proficiency, communication and meaning did not supplant accuracy, but rather were added to balance it. This expanded conceptualization of communication requires teachers to cultivate their learners’ conversational management, cultural appropriateness, and self-regulated approaches to learning (skills that are as much embedded in vocal and nonverbal cues as they are in words), as well as to facilitate learners’ accurate knowledge and use of TL linguistic codes (Canale, 1983; Canale & Swain, 1980).

Non/paraverbal messages function in conjunction with the verbal ones in different ways (Knapp & Hall, 2010); they can substitute, complement, accent, regulate, and sometimes contradict the spoken message. Substitution occurs when a nonverbal cue replaces a verbal one as when a language teacher nods to a student to indicate that he or she can answer a question posed to the group. A non/paraverbal message complements the spoken word when it completes or supplements it as is the case when the enthusiastically spoken words “that’s right!” are accompanied by the teacher’s smile in praising students’ group work. Accenting occurs when the speaker stresses a specific word in the message. Placing emphasis on the word *now* in the sentence “Please take out your notebooks *now* for the next language activity” communicates urgency and indicates that the teacher may be becoming impatient. Non/paraverbal messages also regulate conversational flow as is the case with a learner-leader in a small group who steadily gazes and provides positive vocal back-channeling to the group member who is speaking to encourage him or her to continue talking. Finally, bodily and vocal cues might contradict spoken messages when the verbal, paraverbal, and/or nonverbal interpretations of the message are at odds with each other. On such occasions, the non/paraverbal channel takes priority over the verbal, as with the language learner who says, “I love homework!” but whose rolling eyes and overstated stress on the word “love” make the teacher suspect that homework is the last thing this learner wants to do.

In sum, a “silent partnership” exists among communicators’ words, actions, and voice, systematically conveying key information-saturated features in communicative exchanges. Hence, the interplay among verbal, paraverbal, and nonverbal channels could either diminish or enhance the meaning of a message. At the same time, non/paraverbal communicative elements are regularly enacted in unison with the spoken word, thus allowing them to be recognized as

discrete meaning-carrying units and consequently can be employed to decipher speech. Because language learners need this information, savvy teachers intentionally include non/paraverbal awareness-building activities in their language teaching pedagogy (Harris, 2003).

2.3 The Affective Benefits of Triad Awareness

The primary way individuals communicate their feelings and attitudes is through their actions and voices. When verbal and non/paraverbal channels conflict, *how* something is said generally is more informative than *what* is said in transmitting emotion and guiding listeners' interpretations. Verbal messages tend to carry the content or cognitive load, whereas non/paraverbal ones serve primarily an affective, relational, or emotional role (Richmond et al., 2012). The superiority of the non/paraverbal over the verbal channel in conveying feelings and emotions lies in the fact that verbal messages need to be learned while the meaning of non/paraverbal messages is more instinctively and spontaneously inferred. This makes the non/paraverbal channel more difficult to consciously control and gives it an air of greater authenticity and less deceptiveness. The close interrelationship between words, embodiment, and voice suggests that the most accurate and effective communication transpires when the triad system functions cohesively to transmit consistent meanings. Furthermore, when communication cues are transmitted simultaneously, they together create a compensatory and additive effect (Leather & Eaves, 2008).

2.4 The Cognitive Benefits of Triad Awareness

Nonverbal behavior in language learning performs a private, "self-directed" purpose. For example, a language teacher might observe a learner searching for a word making what seems to be an involuntary sequence of wrist rotations. This unconscious movement, directed

intrapersonally, is a valuable strategic communication and learning tool, aiding the learner to understand and produce language. Whether speaking or listening, learners' embodiment is closely tied to sophisticated internal practices and carries out a decisive function in linguistic processing (Gullberg, 2008).

Research provides evidence that non/paraverbal behavior enhances learning, improves recall, increases working memory, internalizes prosodic structure, and develops self-regulation, among other things (Gullberg, 2008). A myriad of features are responsible for such outcomes, among which are the inclusion of more senses (e.g., combining visual and auditory) in the learning process (Hostetter & Alibali, 2004), elaboration of ideas through visual means, enactment, or embodiment (Negueruela, Lantolf, Jordan, & Gelabert, 2004), activation of concrete representation (McCafferty, 2006), reducing ambiguity (Gullberg, 2003; McCafferty, 2004), conjuring mental images (Riseborough, 1981), offering a way to map out discourse and intentionality (McCafferty, 2004) or lightening the cognitive load of the working memory (Goldin-Meadow, 2005; Goldin-Meadow, Nusbaum, Kelly, & Wagner, 2001).

3. A Critical View of Current Research

In this section, we provide a synopsis of 10 research articles that explore the inclusion of non/paraverbal channels of communication in the learning of an additional language. Although in the preceding section we took the liberty of crossing disciplines to present an overview of theory in the area, in this section we focus only on publications found within second language acquisition (SLA). In our attempt to incorporate as much variety and balance as possible across the list of studies, we defined the following criteria to guide our manuscript selection. We wanted

Table 9.1

Summary of 10 Selected Papers Studying Different Aspects Of Nonverbal Communication Skills

Source	Focus	Content	Research Methods
Communicative Aspects			
Gullberg, 1998	2 parts: Learners' use of strategic gestures for communication; effect of gesture on native speaker evaluation of learners' proficiency	Swedish learners of French and French learners of Swedish; native speakers of same languages	Semi-experimental design: Story retelling; conversational narratives; individual/group comparisons; native speaker ranking of participants using normal or reduced gesture rates
Sueyoshi & Hardison, 2005	Contribution of gestures and facial cues to learners' listening comprehension	42 low intermediate and advanced ESL learners	Random assignment to 3 conditions; multiple choice comprehension task; attitude questionnaire
Sime, 2006	Meaning learners infer from teachers' gestures	22 adult EFL learners	Qualitative/descriptive interviews based on stimulated recall

Affective Aspects

Gregersen, MacIntyre, & Meza, 2014	Dynamic moment-to- moment emotions, language anxiety, their triggers and learners' interpretations thereof	3 high anxious and 3 low anxious adult learners of Spanish as a second language	Self-report survey, idiodynamic ratings, interviews, heart monitoring,
Gregersen, 2007	Language teachers' accuracy in decoding nonverbal emotion behavior and whether training can improve it	13 beginning French as a foreign language students; 31 ESL/EFL graduate students and in- service teachers	Videotaped oral FL exams which teachers viewed twice: before and after training; comparisons in percentages of accuracy
Gregersen, Olivares- Cuhat, & Storm, 2009	Connects language proficiency with frequency and type of gesture use	75 beginning, intermediate and advanced Spanish as a second language adults	Observation of videotaped dyadic conversations; ANOVA

Cognitive Aspects

Morett, 2014	Gesture facilitates communication,	60 undergraduates unfamiliar with Hungarian	Within-subject comparison under 2 conditions
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		encoding and recall of L2 words	
Smotrova & Lantolf, 2013	Mediational function of gesture-speech in instructional conversation	2 Ukrainian EFL teachers and 2 groups of Ukrainian EFL learners (Group 1: 6 advanced learners; Group 2: 8 intermediate learners	Verbal and nonverbal analysis of video- recorded small group work
Matsumoto & Mueller Dobs, 2017	Functions of gesture in teaching and learning grammar	20 beginner- and advanced-level international university students in an intensive ESL program	In-depth analysis of selected video recordings of 5 “case study”-type episodes taken from the larger sample
Van Compernelle & Williams (2011)	“Active reception” in FL group interaction, focus on embodied participation	4 intermediate U.S. learners of French and an expert mediator	Observation of videotaped small group work

to include a diversity of research methods, a variety of non/paraverbal codes (e.g., gesture, facial expression, eye behavior, vocal cues, etc.), and a focus on both teaching and learning. For the identified studies where research question(s) produced data with pedagogical implications, we

noted whether attention was on encoding (speaker's role) or decoding (listener's role), and grouped them into communicative, affective (e.g., emotion), and cognitive (e.g., thought/processing) aspects.

3.1 Communicative Aspects

The three research articles in this section were chosen because they examine a variety of interaction types and communication purposes. In them, readers will discover the use of nonverbal cues, particularly gesture and facial cues, in interactions among learners themselves, learners and native speakers, and learners and their teachers for instructional as well as conversational purposes.

Gullberg's (1998) manuscript is her doctoral dissertation, which she later summarized in a 2008 publication. We included the 1998 version because of its comprehensiveness. In the two-phased study, Gullberg investigated the use of gesture as a form of compensatory communication strategies. In the first stage, she examined the gestures language learners used as they retold stories in both their first and additional languages to native speakers. One of her noteworthy findings was that, rather than replacing speech, strategic gestures usually complemented it, serving to maintain a visual co-reference or providing metalinguistic commentary on the interaction itself. The second phase of the study focused on the assessments native speakers made of learners' proficiency based on the gestures that accompanied learners' language. For the purpose of drawing out pedagogical implications, it is important to note that Gullberg (1998, 2008) discovered that learners use communicatively strategic gestures to: a) solve lexical dilemmas; b) elicit lexical help; c) overcome grammatical difficulties; d) resolve problematic interactions from accumulated difficulties and non-fluencies; and e) move on without resolution. She stressed that gestures need to be perceived as both immediate communicative "first-aid"

measures and as inclusive enhancements to communication for both language comprehension and production.

The second article under the “communication” umbrella was chosen for its focus on listening comprehension in learning an additional language and the involvement of gestures and facial expression. English learners were randomly placed in one of three groups to watch a videotaped lecture by a native speaker: AV-gesture-face (audiovisual with gestures and face), AV-face (no gestures), and audio-only. Subsequently, participants completed a multiple choice comprehension task and attitude questionnaire. Task scores revealed that the exposures that included visual cues were significantly higher and the survey responses showed that learners had an overall positive opinion about nonverbal cues that accompanied spoken language in direct interactions.

Whereas the previous two articles examined noninstructional interactions and the nonverbal cues that learners use for communicative purposes in both the comprehension and production of language, in the third article, Sime (2006) investigated classroom exchanges and the meaning that adult English as a foreign language (EFL) learners bestow upon teachers’ gestures and facial expressions. According to the data Sime collected via stimulated recall interviews, learners perceived gestures and other nonverbal cues as significant in their learning, identifying three main purposes, all closely aligned with the cognitive, affective, and communicative aspects this chapter advocates. First, in terms of cognition, learners claimed that nonverbal cues enhanced the learning process. As emotional signals, teachers’ movements were perceived as trustworthy conveyors of teachers’ emotions and attitudes. And finally, although Sime labeled the third category as “organizational,” she could have accurately named it as “communicative” in that learners saw teachers’ nonlinguistic cues as supplementary tools by

which classroom management was carried out. In sum, learners reported that nonverbal communication was important for the purposes of both learning and socializing.

3.2 Affective Aspects

Because of the paucity of research in emotions in language learning, particularly in the nonverbal dimension, we did not have a large pool of articles from which to choose. That said, although all three concern language anxiety in some form, they nevertheless all lead to very different and important pedagogical implications that transcend the specific emotion addressed.

The first article, Gregersen (2007), is significant in that it confirms that training in nonverbal decoding can be successfully used to identify speakers experiencing negative emotion. It also provides a cautionary tale as the evidence that was produced delineates the pitfalls decoders might face. In this study, in-service and preservice teachers twice watched a videotape with no audio of seven language learners taking an oral exam, four of whom suffered from high language anxiety. During the first observation, teacher participants used their own criteria to judge the anxiety status of the learners; in the second round, observers were provided with specific criteria (Gregersen, 2005) to be attentive to that detailed specific non/paraverbal cues indicative of language anxiety. Although results demonstrated that decoding was more accurate with learners on the high and low ends of the anxiety continuum after training, the teacher participants in general improved their overall ability to interpret non/paraverbal emotional cues.

The purpose of the Gregersen, Olivares-Cuhat, and Storm (2009) study was to infer possible relationships between the proficiency level of Spanish as a foreign language learners and their use of specific types of gestures (illustrators, compensatory illustrators, adaptors, emblems, regulators, and/or affect displays), examining whether language learners gradually

incorporate gestures into the communication process in ways that facilitate meaning. Their specific research questions were: Is there a link between TL competency and frequency of appropriate speech-related, meaning-enhancing gestures? Conversely, is there a relationship between relative inexperience in a TL and use of compensatory gestures with respect to linguistic limitations and gaps in knowledge? Finally, do individuals gesture more while speaking in their first language compared to their TL? English-speaking beginning, intermediate, and advanced Spanish learners were videotaped in dyads while acting out a role play, first in Spanish and then in English. After a “witness” viewed a cartoon video of a robbery, he or she answered questions from an investigating police officer about what was seen. Three observers, all specialists in language learning, then scrutinized the videos of the Spanish language learners, reported the frequency of each gesture type found in the nonverbal cues of each proficiency group by calculating the number of gestures per minute per student, and then created a mean score of gestures per minute for each group of beginning, intermediate, and advanced learners. ANOVA results indicated that advanced learners used significantly more speech-related, meaning-enhancing gestures than did beginning and intermediate students and that participants used significantly more gestures overall in their native English than they did in Spanish. On the other hand, evidence suggested that low-proficiency learners used more self-adaptive gestures that likely indicated negative emotions like stress and anxiety and ultimately kept their hands occupied, leaving fewer opportunities to use their hands to enhance communication.

The third article in this section demonstrates the dynamic nature of language learners’ emotional expression and the ways they adapt moment by moment to such changes. As an individual-level study, it triangulated the following data sources: a) self-report survey (Foreign Language Classroom Anxiety Scale – Horwitz, Horwitz, & Cope, 1986), b) physiological

measures (heart rate), c) idiodynamic data, and d) responses from retrospective stimulated recall interviews (using the graphs produced through the idiodynamic process). Three high- and three low-anxiety Spanish as a foreign language learners participated in order to answer questions surrounding their language anxiety, its triggers, and their interpretations of quickly fluctuating emotional reactions over a short period of time. While wearing heart monitors, they were video recorded giving a presentation in class. Using the idiodynamic method, participants self-rated their moment-by-moment anxiety 42 times over three and a half minutes and later explained their reactions in an interview. The triangulated data sources strongly converged and generated pedagogical implications for dealing with both positive and negative emotions, facilitating the reinterpretation of physiological cues, planning “escape routes” that allow participants to remain active in communication exchanges, and invoking the positive power of preparation, planning, and rehearsal.

3.3 Cognitive Aspects

The next series of four research papers explores the cognitive benefits of non/paraverbal elements in language learning; specifically, the production and reception of vocabulary in learning and instructional processes, the teaching and learning of grammar, and the enhancement of Zones of Proximal Development (ZPDs) as learners work together in small groups.

In the first paper, Morrett (2014) investigated how gesture influences the communication, encoding, and recall in beginning TL learners’ vocabulary acquisition in task-focused conversational settings. Furthermore, she sought to answer questions concerning how gestures impact those who perform them as compared to those who view them in dialogic TL interactions. Her conclusions provide evidence that gesture assists in all of these processes and is an even more potent facilitator of vocabulary acquisition when gestures are enacted rather than observed.

The second paper in this section, Smotrova and Lantolf (2013), examined how gesture and speech work together as a tool of classroom negotiation as teachers seek to clarify the meaning of TL words for their learners. Specifically, they described ways in which language teachers and learners negotiated the meaning of novel TL concepts simultaneously using gesture and speech during instructional conversation. They discovered that, even over a brief time period, interactions demonstrated the alignment of gesture and speech together serving as mediational devices through which learners visually illustrate their interpretations of TL word meanings. Verbal utterances alone would not have been capable of communicating meaning as effectively. In fact, participants indicated their adapted understandings by imitating the teachers' gestures in their own communication.

Matsumoto and Mueller Dobs (2017) examined the interactional competence involved in the production and uptake of gesture in teaching and learning an additional language, but rather than focusing on vocabulary acquisition as in the previous paper, Matsumoto and Mueller Dobs (2017) observed the use of gesture in the acquisition of TL grammar, in particular, that related to temporality. They asked questions related to the roles of teacher and learner gesture in the teaching and discussion of temporal concepts like tense and aspect as well as the contribution of teachers' gestures to students' developing conceptual understanding of the same. Their data, drawn from beginning and advanced learners in an intensive English program, revealed that teachers and students repeatedly used abstract deictic gestures (i.e., pointing) and metaphoric gestures (creating a physical representation of an abstract idea or concept) in the classroom, which transformed into supportive interactional resources for instruction along with assessment of student learning.

The final article in this section, Van Compernelle and Williams (2011), explores the notion of “active reception” during small-group cooperative exchanges in the language classroom, concentrating on the embodied participation of one specific silent group member. Using Vygotsky’s sociocultural theory, they discovered that when utilizing small groups to work on a joint task, it is possible to create a ZPD wherein individuals combine their resources to expand the collective’s emergent insight into an issue or task while simultaneously helping individual group members. Using video-recorded small-group work, the authors demonstrated how the silent group member took into account the main exchanges that helped the group solve a problem. Van Compernelle and Williams (2011) proposed that active reception of this nature helped the group member develop analytic abilities.

4. Pedagogical Implications

A tripartite research approach to communication recognizes verbal, nonverbal, and paraverbal channels as working in unison. In the process of producing output, using non/paraverbal cues can compensate for limited verbal output. Likewise, while processing verbal input, learners benefit from the additional visual and vocal information that non/paraverbal cues provide to decode ambiguous or otherwise incomprehensible language. In daily life, with the exception of situations such as radio broadcasts or loudspeaker announcements, there are very few instances in which learners come into contact with disembodied voices. The interplay among verbal, paraverbal, and nonverbal features of communication implies that teachers who pride themselves on providing authentic language learning opportunities must deliver visual as well as aural input: out with tape recorders and in with video and teacher-produced input.

Furthermore, evidence from an integrated, tripartite approach to communication demonstrates that in addition to compensating for limitations in TL competence, embodiment

and vocal cues can also be optimized for other communicative functions (including sociolinguistic, discourse, and grammatical), as well as affective and cognitive purposes. In general, the research highlighted in this chapter shows that non/paraverbal cues can be used not only to improve verbal communication but also to enhance instruction. Classroom interaction is between and among teachers and learners, making both the beneficiaries of a heightened awareness concerning the use of physical movement and voice to encode and decode verbal language. More specifically, language learners' non/paraverbal cues are vital resources for teachers in their continual assessment of learners' linguistic development and provide an additional information source for teachers to consult when adapting their instructional strategies. Because of the added value that the intentional use of instructional gestures and varied vocal cues provides to learners as well as the unsolicited information provided to teachers about their learners' understanding and development, teacher education programs need to consider ways to heighten preservice teachers' mindfulness and responsiveness to them.

The research presented in this chapter also suggests that non/paraverbal behavior provides clues to interlocutors' affective states, giving another reason for teachers and learners to be more aware of their presence. Research cautions that assigning meaning to the emotional dimension of non/paraverbal cues is complicated and riddled with possibilities to misinterpret signals. Decoding is further complicated by the dynamic and sometimes idiosyncratic nature of emotional communication, as individuals have different triggers and ways of manifesting their internal states. On an optimistic note, however, the research described here also indicates that with explicit awareness training, encoding and decoding accuracy can be improved.

Non/paraverbal communication also positively influences cognitive processes that improve language learning in at least two ways: 1) Enactment increases learners' ability to store

and retrieve new information; 2) The relationships fostered among and between learners when they work in small groups are enhanced via the information they transmit without words, thus creating more effective ZPDs in which learners provide support for one another and combine their collective resources.

5. Theory- and Research-Driven Activities to Teach Nonverbal Acuity

This final section provides six broadly defined activities with subcategories that are direct outcomes from the research provided earlier. Among them are: 1) Explicit compensatory strategy training for language learners (Gregersen & MacIntyre, 2014); 2) Increased visualization in language classrooms to promote authenticity and improved comprehension; 3) Encoding and decoding “guidelines to live by” in language teacher education programs; 4) Embodied practices to promote effective cognitive processes; and 5) Small group configurations for enhancing ZPDs via non/paraverbal communication.

5.1 Explicit Compensatory Strategy Training for Language Learners

Gullberg (2008) highlights the ways in which gesture can help language learners compensate for their limited TL knowledge. When learners master this kind of strategy, they are able to get themselves out of the tight corners and use nonverbal cues to make themselves understood. we present a series of seven sequenced “best practices” (raising awareness, deepening awareness, presenting and modeling strategies, providing opportunities for practice, self-evaluating effectiveness, transferring strategies to new tasks, and continuing evaluation and monitoring of strategy use) to explicitly instruct the compensation strategies that Gullberg (2008) mentions in her research. While not all strategy instruction is universally effective, research does suggest that its efficacy is improved when carried out over an extended timeframe as a

systematic instructional element inserted into regular classroom practices and attuned to students' learning styles and needs (Cohen, 1996; Ehrman, Leaver, & Oxford, 2003; Macaro, 2006; McDonough, 1999). Furthermore, the more explicit the instruction, the more successful it will be (Oxford, 2012), beginning with teacher scaffolding that progressively transitions into learners using self-selected strategies independently (Chamot, Barnhardt, El-Dinary, & Robbins, 1999).

Raise Learners' Awareness

The first step is to raise learners' awareness of the non/paraverbal compensation strategies they currently use in familiar tasks through activities like games, questionnaires, and open discussions. Instructional applications of research tools like retrospective interviews, stimulated recall interviews, questionnaires, written diaries and journals, and think-aloud protocols may also be used.

Deepen Learners' Awareness

A discovery-based approach can be used to deepen learners' awareness by performing a task with no strategy instruction and then exploring non/paraverbal compensation strategies and brainstorming and/or sharing what does and does not work.

Present and Model Strategies

Strategy use varies by learner, task, and goal. Successfully presenting them to learners is contingent upon emphasizing their utility, abstaining from portraying them as recommendations, and accentuating that there is no "right" or "wrong" strategy but rather one that is optimal for a particular learner, task, and goal. Introducing and modeling contextualized non/paraverbal compensation strategies includes explaining them, relating them to learners' specific communication problems, and highlighting their potential benefits. Strategies presented at the

very moment learners are feeling overwhelmed by their limitations will be more readily accepted. Possible variations consist of inviting learner feedback on if and how a non/paraverbal strategy has been implemented and formulating a checklist of strategies for later use.

Provide Opportunities to Practice Strategies

Language learners require a large assortment of practice opportunities to deploy their newly acquired non/paraverbal compensation strategies (or combinations thereof) and progress toward greater autonomy as teachers gradually remove their scaffolding. Some self-directed learners might also begin monitoring their strategy use at this stage by determining whether they are capitalizing on the strength of a non/paraverbal strategy and whether they were indeed able to make themselves understood through the use of compensation. Practice opportunities provided just as a learner struggles to encode a particular message are quite meaningful because they meet an immediate need and assume a tangible form.

Self-Evaluate Strategy Efficacy

With an appreciation as to whether non/paraverbal compensation strategies work for them, learners can then perceive the advantages of using them by accumulating their own reservoir of strategy knowledge, insight into their personal learning style, awareness of which non/paraverbal compensation strategies work best for them, and an understanding of how to connect strategies to their communication. Sensitivity to previous strategic accomplishments begins with goal-setting prior to a specific task or event, ascertaining which non/paraverbal strategies might work, determining the measure for success, and then assessing the relative worth of those strategies upon task completion.

Transfer Strategies to New Tasks

At this stage, learners are now ready to transfer the non/paraverbal strategies to new tasks, select which to use, reflect upon ways to cluster them into strategy chains, and produce a collection of preferred compensation strategies. Meanwhile, teachers continue to relinquish control and dismantle scaffolding.

Continue to Evaluate and Monitor Strategy Use

Formally or informally, teachers and learners assess the impact of new non/paraverbal strategies on performance. Learners can take charge of the process via discussions and/or think-pair share opportunities that provide input on each learner's ability to make him/herself understood when gaps in linguistic knowledge arise. Teachers can encourage the setting of new goals and reward learners' efforts.

5.2 Ideas to Increase Learners' Comprehension and Add Authenticity

In the previous series of activities, we focused on increasing learners' ability to produce or encode language verbally via explicit instruction in non/paraverbal compensation strategies. In the following section, we concentrate on improving learners' comprehension, or ability to decode language used in interaction. Two of our 10 aforementioned investigations, Sueyoshi and Hardison (2005) and Sime (2006), both suggest that increased visualization and inclusion of more senses in TL communication helps learners comprehend verbal utterances more effectively. With this in mind, it behooves language teachers to abandon the use of any decontextualized utterances or disembodied voices. This might mean replacing tape-recorded texts with those accompanied by video or for teachers to read passages aloud rather than having the audio prerecorded. Kellerman (1992) found that the mere visual presence of teachers' faces, eyes, and lips even without any other visual supports significantly help learners understand verbal

language. One need only think about the difference between in-person and telephone conversations to understand this principle. Furthermore, for instructional purposes, accompanying classroom teacher talk/instruction with written language via PowerPoint or handouts aggregates more senses into the communication process. Using body language, including gesture, adds meaning, reduces misinterpretations, and clarifies ambiguity. Whenever possible, show as well as tell.

Beyond ascertaining that the verbal language to which learners are exposed is accompanied by visual stimuli, it is also important to provide opportunities for learners to interact authentically in their TL where they also have visual access to interlocutors' body language, as in tasks that use role play and drama. In fact, researchers (Haught & McCafferty, 2008) found that when drama techniques are incorporated into language learning, participants respond by imitating not only the verbal performance of the instructor and classmates but also their nonverbal expressions, including gestures, allowing the "actors" through drama to "try on" the language and culture and simultaneously increase their target language proficiency.

5.3 Ideas to Enhance Instruction and Assess What Learners Really Know

Even though the research presented here underscores the significant role non/paraverbal channels play in the communication process of teaching and learning languages, few language teacher preparation programs pay more than a modicum of attention to them. That said, in this section, we provide some advice that teacher education programs might consider as they embed a tripartite approach in their curriculum.

Table 9.2 is an amalgam of 18 strategies that combine ideas from Beebe, Beebe, and Redmond (2014) and DeVito (2014) for teachers to become more effective nonverbal decoders

and encoders in the language classroom that may also be passed on to their learners to improve their TL communication:

Table 9.2

18 Strategies for Increased Efficacy in Nonverbal Communication

Decoding Strategies	Encoding Strategies
Context: Pay attention to it	Awareness: Of your own signals
Clusters: Watch out for them	Avoid: Contradictory signals
Consider: Previous experience	Analyze: Others' nonverbal cues
Compare: Expectations with reality	Ask: For input from interlocutors
Calculate: Personal nonverbal skill	Attempt: Plenty of practice
Confirm: Your perceptions with others	Alternatives: Contemplate options
Contagious: Emotions are infectious	Avert: Extremes and monotony
Caution: Exercise it in your conclusions	Adapt: Message to specific circumstances
Choices: Seek alternative options	
Construct: A big picture	

5.4 Embodied Practices to Promote Effective Cognitive Processes

Embodiment in psychology and education has received much more attention lately than in the past. In the following paragraphs, we briefly outline several activities that Gregersen and MacIntyre (2016) outlined in their book *Optimizing Language Learners' Nonverbal Behavior: Tenets to Techniques*.

Based on the notion that TL comprehension can be improved by grounding it in action, learners can evoke sensorimotor experience through embodied cognition, for example, by creating mnemonic devices for remembering names. Gregersen and MacIntyre (2016) invite learners to think of the first letter of their name and of an adjective that begins with the same letter that describes them. In a series of movements, each learner performs his or her adjective and name along with the movements that go along with it so that the whole group repeats the words and movements. A similar activity involves the use of physiographic gestures to evoke mental images (e.g., the use of gestures that illustrate speed, size, and directionality of an adverbial phrase like, *hastily flew up*). In this case, learners are read a short text in a monotone voice with no gestures and participate in a “quiz” about what they remember. The text is repeated with accompanying physiographic gestures and are again polled on their understanding. Learners are then invited to create their own passages.

To go beyond decoding to encoding, Gregersen and MacIntyre (2016) also offer an activity that adds facial expression to gesture, tapping into both visual and motor modalities to improve memory and aid recall. The teacher writes one descriptive “touch” adjective per slip of paper from a list provided of matching synonyms (i.e., *spongy* and *squishy*). From a hat, learners draw one of the adjectives, read it, and disperse themselves throughout the room. In silence, each learner locates the individual who drew the synonym to his or her adjective through performing the gesture that represents the adjective. Upon finding their partners, pairs create lists of 10 nouns that their adjectives could modify. The same procedure is then carried out for adjectives describing feelings (i.e., *afraid* and *fearful*), but this time rather than using gestures, learners communicate via facial expressions.

These are but 3 of the 27 activities that Gregersen and MacIntyre (2016) offer as a means of optimizing language learners' nonverbal behavior for cognitive purposes. Others were created to accelerate learners' processing and cognitive access of new material, improve TL recall, deepen processing and internalization of lexical items through the use of emblems and iconic gestures (e.g., hand movements that resemble their referent), and to use embodied actions in the form of beat gestures to tap out prosodic elements. They also focused on the processing of linguistic forms like idioms and using freestyle rap to internalize TL intonation and rhythm as well as using gesture to reduce learners' processing load, among other embodiment objectives.

5.5 Small Group Configurations for Enhancing ZPDs via Non/paraverbal Communication

Our last pedagogical implication targets the potentiality of creating ZPDs so that learners can combine their communal resources to enhance the group's expanding progress as well as each individual's growth. According to Van Compernelle and Williams (2011), learners can think with their hands as they work cooperatively toward an objective, and such gesture helps in the creation of a ZPD. This necessitates on the part of the teacher that dyads and small groups are utilized as a regular part of instructional practice, with a careful eye toward pairing and heterogeneity. The most successful ZPDs are created when group members feel their successes are shared through mutual promotion of one another's learning but at the same time learners are accountable as individuals. Additionally, effective ZPD partners use social skills to process not only the task at hand but their teamwork as well (Johnson, Johnson, & Smith, 2006).

6. Conclusion

The overall purpose of this anthology was to fuse SLA theory, research, and L2 pedagogy on the skills essential to language learning to assist researchers and practitioners in forging

unambiguous links among theory, research, and practice. Although not commonly perceived as one of the indispensable skills for learning an additional language, non/paraverbal communication transcends many of the others and plays an important role in skills such as listening, speaking, vocabulary and grammar acquisition, and willingness to communicate in the dimensions of communication, affect, and cognition.

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