Looking Beyond Words

Looking Beyond Words:

Gestures in the Pedagogy of Second Languages in Multilingual Canada

By

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Cambridge
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I dedicate this book to my parents.

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ACKNOWLEDGMENTS

I would like to thank Prof. Domenico Pietropaolo from the University of Toronto for his encouragement and mentorship during the writing of this book.

I am grateful to the University of Windsor for granting me funds, particularly the *Research Grant for Women*, that have enabled the completion of this book.

I would like to thank my colleagues at the Department of Languages, Literatures, and Cultures. Among them, Prof. Basil Kingstone offered very helpful comments on a previous version of this book. I am also grateful to the students Alyssa Daichendt and Laura D'Agnolo for helping me file the classroom language data in this book.

Many thanks go to Meghan Desjardins for her copy-editing work, and to Mr. Sam Baker at Cambridge Scholars Publishing for assisting the preparation of the manuscript.

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CHAPTER ONE

INTRODUCTION

Approaching a culture different from our own can be a fascinating but also troublesome experience. Culture is one of the most difficult aspects of a new language to acquire, especially in adulthood. Growing up within a community of speakers and developing habits and life experiences in a specific world area are factors that have an inevitable impact on the learning of new languages and new cultures. We usually become aware of our cultural background and its influence on our behavior when we are confronted with alternative ways of living and communicating. Many people today learn a second language (L2) in order to be able to interact with a target speech community or to be competent in an internationally known language such as English or Spanish. Language learning brings together people from diverse cultures, each with a different concept of communication.

World communities organize speaking and listening patterns in different ways. Gesture, for example, can play a more or less important role in the formulation and interpretation of meaning in a language. The index finger pointing at something or somebody is generally defined as a universal type of gesture. Other gestures, instead, are only found in specific cultural groups or, although sharing the same form, they assume different meanings depending on the community of speakers considered. One aspect of oral communication that distinguishes Italian from other languages is its reliance on a wide range of gestures. Kendon (2004) defines Italian as a "gesture-rich language." This fact has been, and still is, reason for much stereotyping and misunderstanding. Italian is a minority language compared to other most commonly learned languages in the world, but it is present in countries to which Italians have immigrated (such as Canada and Australia). In Italian language classes outside Italy, students are likely to look at the comic, playful side of Italian body language rather than at its cognitive and communicative functions (cf. Salvato, 2009, 2010). This also derives from the ways media have exaggerated Italian nonverbal language in films and television series (e.g., *The Sopranos* in North America).

The idea of this book originates from the growing number of insights into the recent literature on gesture studies, which have renewed the attention paid by scholars to gesture functions and meanings in communication and in language learning (cf. Müller, Ladewig, Cienki, Fricke, Bressem, McNeill, and Tessendorf, 2013, 2014; Seyfeddinipur and Gullberg, 2014). Studies have revealed that gestures help the understanding of the language acquisition process and the learning of additional languages. The observation of how gesture and speech participate in communicative acts has produced engrossing research questions in contexts where the combination of languages and cultures is complex and diversified. Being a country of immigration, Canada is such a case. Multilingualism, multicompetence (i.e., competence in multiple abilities), and multimodality (i.e., different means used to convey and interpret meaning) define everyday activities in Canada, its school and work settings, as well as family and community life. This book discusses how advancements in different areas of gesture studies, multilingualism, multicompetence, and multimodality are bound to influence language pedagogy in Canada.

This book aims to examine multilingualism, particularly multilingualism in Canada, by including gesture as a nonverbal dimension of language and as a means to language acquisition. In doing so, this book brings gesture to the fore and counteracts traditional practices in language classes or textbooks, which typically leave the nonverbal aspects of a language either uncommented on or underrepresented compared to the verbal aspects (for Italian, see Colli, 2004; Danesi, 2000; Diadori, 1992a,b; Salvato, 2005, 2008a,b, 2009). Gesture is a means to language education. Both teachers and learners can avail themselves of gestures while carrying out tasks and pursuing objectives. The examination of gesture uses in class can further elucidate functions and meanings of gesture in communication inside and outside the specific context of a language classroom (cf. Kellerman, 1992; Lazaraton, 2004; Neill, 1991; Tellier, 2008).

This book is also indebted to the reading of the latest official documents that direct language pedagogy and provide guidelines for language teaching and learning, where gesture has been finally granted a position within language planning and in the evaluation of pedagogical results. Among the most outstanding documents, there are the *Common European Framework of Reference for Languages* (2001); the American *Standards for Foreign Language Learning in the 21st Century* (1999); and the Ontario school curriculum (2006, 2007) in Canada. This book values gesture studies and pedagogical guidelines that encompass the nonverbal dimensions of a language with the hope that language education will

become more sensitive to gestures and other nonverbal means of communication.

The first goal of this book is to provide an overview of what we currently know about the role of gesture in language acquisition, particularly in the acquisition of a second language, and in the development of multilingualism. The second goal of this book is to focus on gestures in the pedagogy of second languages, particularly Italian in Canadian multilingual university settings. As a contribution to research, this book introduces three studies that investigate the interpretation of Italian gestures by language learners in Canadian universities. By borrowing from the principles and tenets in the most recent theories of Second Language Acquisition (SLA), applied linguistics, and the semiotics of gestures, this book offers some directions towards the systematic integration of gestures into the pedagogy of second languages and of Italian outside Italy.

The following audiences are likely to be interested in reading this book: scholars researching second language acquisition in conjunction with gesture studies; educators and teachers interested in the integration of gestures into the pedagogy of second languages, that is, a more multimodal approach to second language pedagogy; and scholars whose focus is multilingualism. The inclusion of gestures in language classes and in textbooks can help redefine the concepts that have directed language pedagogy and textbook writing until today. As an example, an examination of textbooks of Italian available on the North American market has revealed that they offer no systematic overview of types and functions of Italian gestures and their role in oral communication (see Salvato, 2007, 2008a,b). It is not surprising that this situation contributes to a limited development of nonverbal competence among Italian language learners. Comprehension, and possible production, of Italian gestures are consequently affected.

It is true that the study of gesture has gone through different phases in history, sometimes coming to the fore of language theories (cf. Wundt, 1973), at other times being regarded as an element of less importance compared to speech. As we read in Kendon (2004), in Roman times gestures appear in rhetorical treatises as tools that enable refined expression. In the 16th century, gestures are appreciated as a natural type of language compared to artificial and conventional spoken languages. In the 18th century, gestures are interpreted as the first form of language, precursors to speech, and in the 19th century, gestures are part of anthropological studies across cultures. In the 20th century, then, there is a diminished interest in gestures but starting from the 1970s, the question of

language origin, the study of sign languages, the role of gestures in language development, and their relationship with speech, along with the popularity of the cognitive approach to language studies, renewed the interest of scholars in gestures.

Within educational settings, gestures have a long history too. In classical times, writers of rhetorical treatises would emphasize the importance of bodily movements in the education of young orators (see Quintilian's *Istitutio Oratoria*, 1978). In modern times, language education strives to make the concepts of competence and performance more and more indebted to the aspects that characterize language uses in communication. Language classes and textbooks today typically embrace a communicative approach because they generally interpret language teaching and learning as focused on the development of language for communicative purposes. If gestures significantly define a target language, the communicative approach supports the integration of this aspect into language programs. Furthermore, it is often advocated that movements and actions add concreteness and imagery to verbal information and contribute to a better representation and comprehension of knowledge (cf. Clark and Paivio, 1991). In general, the combination of verbal and nonverbal language is expected to produce improved learning outcomes. At the same time, this practice is said to account for students' diverse abilities, particularly their aptitude for more visual or more audio input and vice versa.

Several examples from any language show that there is indeed a link between speech and gesture in communication. It is a common practice for anyone to combine a pointing gesture (i.e., deictic gestures) with an expression such as "this, that"; or to use a rhythmical gesture (i.e., beats) as one unfolds thoughts in a conversation. It is also frequent to attribute to gestures a complementary or substitute function with and for speech, either to make speech clearer or to replace it altogether. This is the case when a gesture illustrates the words of a speaker, for example by showing the size and the physical characteristics of an object under examination (i.e., iconic or representational gestures).

The presence of gestures generally works in favor of comprehension. Gestures are especially useful because they can define location, direction, type of action, and agency. For example, a hand gesture can show the way an object is positioned on a surface (e.g., standing, lying, hanging). Arms flexed vs. arms straight along the body can specify the characteristics of a movement (e.g., running vs. walking). The two sides of the body can represent different referents in discourse (e.g., one hand represents one subject, the other hand another subject). Gestures can also reflect changes in viewpoint. A speaker may perform gestures from the perspective of a

protagonist in a story (i.e., character viewpoint) rather than the perspective of an outsider to the story (i.e., observer viewpoint) (cf. McNeill, 1992). Debreslioska, Özyürek, Gullberg, and Perniss (2013) argue that changes in viewpoint are regulated by whether speakers maintain or re-introduce referents in their discourse. The authors find that with maintained referents, character viewpoint predominates, whereas the reintroduction of referents prompts a change to observer viewpoint. Gestures in these instances contribute to cohesion in discourse.

Context, however, can determine how much information is conveyed through gestures and speech. In noisy places, words are not a possible means of communication, whereas gestures enable the exchange of information all the same. Momentarily forgotten speech or lack of technical and elaborate words can also be resolved through gestures. Snapping fingers are often used while one is trying to retrieve missing words. Gesture can also indicate to the interlocutor that their participation in the search for the words in a communicative act is welcome. On the other hand, gesture can occur in the absence of an interlocutor. For example, people use gestures while talking on the phone or with themselves in private speech. Blind people too have been found to gesture while interacting with other blind people (cf. Iverson and Goldin-Meadow, 1997).

A gesture can then help speakers build co-reference. Instead of pronouns, gestures can indicate the anaphoric relationship between two elements in discourse. Moreover, new topics or subjects, or emphatic information, are often introduced by gestures. Gestures can also facilitate the formulation of words in complex tasks such as reasoning or explaining, where gestures contribute to the organization and verbalization of thought. Gestures can provide insight into people's thoughts or feelings that are not expressed in speech. It is often the case that a speaker reveals his or her real intentions through nonverbal behavior rather than with words. For instance, scratching one's head often conveys the meaning of hesitation even when words by themselves do not express this concept.

These examples of gesture and speech cooperating in the formulation of meaning introduce the theoretical framework established by two major scholars in the field of gesture studies: Adam Kendon (1972, 1987, 1988, 2000a, 2004), an anthropologist, and David McNeill (1985, 1992, 2005), a psycholinguist. In the 1970s, both Kendon and McNeill came to the realization that speech and gesture are two aspects of the same process, although they placed a different emphasis on the context in which communication takes place (cf. Holler and Beattie, 2003). For Kendon (2004), context has an impact on thought with consequences on the

speaker's intentions and on the collaboration among the interlocutors in the achievement of a communicative objective. Gesture is a resource on which speakers can draw to assist their communicative intent. For McNeill (1992, 2000), context takes a less important role as the author focuses more on how gesture, along with speech, reflects the speaker's thought and mental representations.

Kendon (2000a) defines the close relationship between speech and gesture as a "unity" and a "duality" at the same time. This is because each modality provides for its own function and meaning while they both participate in the realization of an utterance. In Kendon's (2004:7) theory, the collaboration of speech and gesture is meant for the others: "any ensemble of action that counts for others as an attempt by the actor to 'give' information of some sort [...] may be constructed from speech or from visible bodily action or from combinations of these two modalities." Kendon (2004:15) says that movements assume the status of gestures when they are recognizable by the interlocutors as intended to express some content: "actions that have the features of manifest deliberate expressiveness." In other words, a gesture cannot be separated from the participants in communicative acts and their interpretation. As evidence of this, one can consider the intense and multiple exchanges that take place on a daily basis in Naples, Italy (cf. Kendon, 2004). It is a fact that the favorable type of climate in the city facilitates life and communication in the open air. Kendon (2004) describes the exchanges in Naples as a sort of competition, where gestures, sometimes in complex and elaborate forms, enable communication in very busy environmental settings and are the only means for individuals to compete with one another for attention.

Both speech and gesture organize their characteristics in an utterance. Speech is organized into packages that coincide with tone units (e.g., intonation), which in turn correspond to units of meaning. Gesture is also organized into packages of action, called gesture phrases, which tend to be semantically coherent with the units of meaning expressed in tone units (Kendon, 2004). Speakers produce gestures that relate to speech, and organize them in a hierarchy. Gesture and the bodily parts involved will vary according to the size of the speech unit. Small speech units, such as a syllable, will accompany small body moves whereas larger speech units, such as change of topic, will associate with greater body moves (cf. Kendon, 1972).

Kendon (2004) points out that gestures usually express just a part of the idea in the tone unit. A gesture can make more obvious the characteristics of a movement expressed in a phrase. For example, a speaker can provide more specific information about the manner of the

action through a body movement (e.g., "running") without necessarily verbalizing the same information (e.g., "He left the house"). Moreover, the speaker has some degree of control over a gesture, its meaning and function, just as he has control over speech. In repeating or in reformulating an utterance, whether for himself or for the others, whether for correcting previous speech or for making it more precise or more emphatic, the speaker repeats or reformulates both speech and gesture. This is further evidence of the fact that speech and gesture cooperate in the realization of meaning and that both are equally important for the speaker. Their "partnership," as Kendon (2004:127) calls it, changes according to the focus and the aim that the speaker intends to convey, that is, how the speaker perceives the communicative needs of the interlocutor: "speakers [...] can control these two components and can orchestrate them differently, according to the occasion."

In collaborating together in the realization of an utterance, there is no need for gesture to assume the characteristics that define speech (cf. Kendon, 2000a). Some gestures, however, are quite conventional in form and function as if they were lexical items. These are symbolic gestures, or emblems, which often convey meaning without speech but can be lexicalized in words. Kendon (1988) says that the so-called "emblems" represent a communicative code in their own right, established within a community of speakers to function without speech. The author adds that other gestures as well can occur independently of speech. These tend to assume standard forms and general and abstract meanings. They become fully lexicalized and similar to words and compete with words in the realization of discourse. Kendon (1988) proposes the example of the gesture that indicates the action of "drinking" to demonstrate that it can assume the meaning of "I want to drink" but also of "let's have a drink." The meaning and performance of this gesture depend on the communicative situation and on the verification of the conditions that justify the production of the gesture. This is why Kendon (1987) believes speech and gesture to be two separate modes of representation of meaning, where meaning is not transformed from one modality into the other or through the other. Meaning results from the cooperation of speech and gesture.

Sharing with Kendon (2004) the idea that speech and gesture are linked modes of communication, McNeill (1992:2) states that gestures work together with, not in alternation to, speech: "gestures are an integral part of language as much as words, phrases, sentences, gesture and language are one system." Gestures reveal thought in an imagery form. Along with speech, they are a manifestation of the same underlying mental process. As

McNeill (1985) states, "gestures offer themselves as a second channel of observation of the psychological activities that take place during speech production." The fact that gesture shares with speech the same mental process is the very reason why the author questions the idea that gestures are nonverbal (McNeill, 1985).

In his theory, McNeill (1985, 1992, 2005) focuses particularly on those spontaneous movements of hands, fingers, and arms that accompany speech and that bring personal and idiosyncratic aspects of thought into the realization of discourse. Like Kendon, McNeill (1992) does not view gestures as a translation of speech into visual and kinesic forms. The author says that speakers are often unaware of conveying a dimension of thought by means of gestures. They do not usually perform the whole content of their speech in a gestural form because they make a selection of what they want to render in this form. In McNeill's (1985) view, this process shows what is relevant to speakers. McNeill (1992:105) defines gestures as "symbols that exhibit meaning." In a narration, for example, speakers may describe the movement of an action rather than the physical features of a character. While narrating, speakers may use their hands to mean different things: a character or an object in the story. In this way, gestures reveal their symbolic nature. Similarly, metaphoric gestures provide speakers with the opportunity to think of abstract concepts, such as space, in concrete forms. Metaphoric gestures also reveal a symbolic nature (McNeill, 1985, 1992). The possibility of this happening suggests that gestures, unlike speech, do not depend on rules or standards but express the elements of thoughts that are important for the speaker at the very moment of producing meaning. In other words, gestures are more direct manifestations of the thinking process.

Speech conveys linear and segmented meaning in accordance with its systematic rules and functions. Gesture creates global and synthetic meaning, which is not systematic in form. For example, the verbal expression "climb up" uses two speech elements to indicate manner and direction. The corresponding gesture describes the action as a whole, simultaneously performing manner and direction. As McNeill (1992) comments, the difference distinguishing speech from gesture is revealed in the overall representation of thought as well as in a mutual influence. On the one hand, gestures are immune to the errors that affect speech; they enable the expression of personal and context-specific aspects of thought that speech alone would not be able to manifest; they can also anticipate references expressed at later points in speech because of grammatical constraints. On the other hand, gestures remain closely linked to speech. They occur during speech, they contribute to the expression of meaning

with speech, and the two develop together in children, but they also break down together in aphasia. Gestures use space to express meaning, whereas speech uses time by putting together sounds, words, and phrases in a temporal progression (McNeill, 1985, 1992).

An important tenet in McNeill's theory is that gestures have an impact on thought. Gestures are a representation or expression of thought but they are also thought itself. McNeill (2005) believes that the interaction between opposite modes of thinking (i.e., global-synthetic vs. linear-segmented) is in the first place the source of thought. In this sense, McNeill's theory is indebted to Vygotsky's (1986), from whom McNeill adopts the term "material carrier" to say that gestures are the material carriers of meaning. McNeill (2005) agrees with Vygotsky (1986) when he says that meaning exists and develops in conjunction with its material carrier. McNeill (2005) proposes to look at verbal thinking also in the form of action. Gestures and the accompanying speech manifest verbal thinking. When combined, they create minimal units called "growth points" (Vygotsky, 1986). As speakers formulate an utterance, speech and gesture shape thought and influence one another (McNeill, 2005). Thinking is revealed through the verbal mode, speech, and through the nonverbal mode, gestures. Gestures that occur with speech embody imagery. They are produced as the speaker thinks and speaks in a dialectic of images and language. The integration of speech, gesture, and imagery forms growth points (McNeill, 1992, 2005). Thinking, speaking, imagery, and gestures are all part of the same process, where the dynamic dimension revealed through gestures complements the static dimension revealed through speech (McNeill, 2005). Despite the instability of this dialectic, growth points "must retain properties of the whole" (McNeill, 1992:220). The components of the unit possess "unique semiotic properties" and each can surpass "the meaning possibilities of the other" (McNeill and Duncan, 2000:144).

One implication of the growth point hypothesis is that without imagery, there could be no speech. As McNeill (2005:125) states: "it is not that one thinks first, then finds the language to express thought […] rather, thinking, as the source of meaning, emerges throughout the process of utterance formation." This idea is also at the base of the evolution of language (McNeill, 2012). Without gestures the human brain and language could not have evolved. Thanks to the interaction between different modes of thinking "the brain became able to combine hand movements and vocal action sequences under some significance other than that of the action itself" (McNeill, 2005:247). Another implication of the growth point hypothesis is that psychological processes and communicative activity are

inseparable. Speaking and gesturing are always motivated, whether to influence the interlocutor in communication or to influence the speaker in cognitive activity. Communicating for the others or for ourselves does not necessarily occur as separate and independent activities. Gestures can simultaneously express a speaker's interpretation of a situation for another person to understand it while aiding the speaker in developing this understanding (cf. Vygotsky, 1986).

Besides discussing the relationship between speech and gesture in an utterance, scholars have also debated the origin and the nature of their link. Most theories agree with the view that gesture and speech come into place through two independent processes. Some theories see gesture as preceding speech. They claim that gesture facilitates lexical retrieval (the Lexical Retrieval Hypothesis). Freedman (1972), for example, interprets gesture as a means that facilitates speaking. His approach stems from Dittman's (1972) hypothesis according to which body movement can accompany the rhythmic properties of speech. Dittman (1972) provides data to show how body movement relates to hesitation in speech. The author argues that this happens especially at start positions of the phonemic clauses, which are the smallest units where lexical and syntactic choices are made. Freedman (1972) takes a step further and shows that some hand movements are congruent with speech; they can supplement or accentuate speakers' words. This hypothesis assigns to gesture the important function of creating and monitoring speech in cognitive processes. Other theories interpret speech as preceding gesture (Butterworth and Hadar, 1989; Feyereisen, 1987; Hadar and Butterworth, 1997). Gestures occur when there is an overload of information in working memory, or a mismatch between the speaker's intentions and actual utterance. The fact that gestures can occur in absence of speech further proves that gestures and speech do not have a common processing origin.

Gesture and speech are also considered by some scholars to develop in parallel with no collaboration. By including gesture in Levelt's (1989) linear information processing model for speaking, De Ruiter (2000) formulates a series of stages so that the processing of gesture parallels the stages for the processing of speech. The author believes that aspects that cannot be part of the verbal expression will form gestural expression. The plan for using speech and gesture starts at the same stage, the Conceptualizer stage. In subsequent processes, however, speech and gesture proceed independently.

Yet there are theories that assume gesture and speech to develop independently although they collaborate with one another. In the Information Packaging Hypothesis (Kita, 2000), for example, gestures

enable the representation and packaging of imagistic thought that will become ready for verbalization. Kita (2000) argues that speech generates analytic thinking whereas gestures create spatio-motoric thinking. This fact makes each modality offer an alternative possibility for the representation of meaning, which becomes particularly useful on occasions when either modality is not available. In the Lexical Interface Hypothesis, the lexical resources and the syntactical characteristics of a language impose constraints on how information is organized in gestural form (see Kita and Özyürek, 2007).

As already discussed earlier in this chapter, McNeill's (1992) Growth Point theory claims that speech and gesture originate from the same mental process and are a single integrated system. Both speech and gesture develop from a growth point, in which speech, gestures, and thinking dialectally and continuously influence one another.

In sum, the place and the nature of the link between speech and gesture has been interpreted in different ways. In some perspectives, speech is primary and gesture is auxiliary. In others, gesture and speech are equal partners and gesture is an integral part of an utterance. Perspectives then differ in their focus. Some interpret gesture as a window on thought (McNeill, 1992, 2005), whereas others focus on the interplay between imagistic and linguistic thinking (e.g., the Interface Hypothesis), or they focus on the communicative intention that makes speech and gesture create multimodal utterances (Kendon, 2004).

Gestural theory, the relationship that gesture establishes with speech, and the debate about the link that unites gesture to speech and vice versa all reveal the multimodal nature of communication (cf. Müller, Ladewig, Cienki, Fricke, Bressem, McNeill, and Tessendorf, 2013, 2014; Seyfeddinipur and Gullberg, 2014). Interactional exchanges among native or non-native speakers entail not only the use of words but also of gestures and other nonverbal aspects (e.g., gaze, proxemics), which enable the expression of contents that would not be conveyed otherwise, or would be formulated with fewer nuances of meaning. This fact demands that the observation of communicative exchanges is carried out in all of their characteristics, which can consequently help understand intrapersonal speakers' intentions (cf. Hadar and Butterworth, 1997; Kita, 2000) and their interpersonal communicative objectives (cf. Cohen, 1977; Beattie and Shovelton, 2007).

Gestural theory also indicates that attention to gestures can provide new insights into the process of second language development (cf. Gullberg, 1998, 2006, 2009a,b, 2013a,b, 2014). Traditionally, SLA scholars have been concerned with speech more than with gestures. Recent

studies, however, suggest that the way L2 speakers use and interpret gestures provides compelling information about the function of this visual and kinetic aspect of communication, both for the learners, who are in the process of developing knowledge of a different language, and for the interlocutors, who participate in communication with them (cf. "foreigner talk").

Gesture occurrences are not only a prerogative of non-native speakers, who compensate for lack of target verbal language by resorting to gestures to continue communicating. Gullberg (2011a), one of the major scholars in the field of gesture studies in SLA, confirms that native and non-native speakers equally rely on gestures in communication. In her study, the author found that ten Swedish and twenty-one Dutch learners of L2 French along with fourteen French learners of L2 Swedish, who received formal instruction as low-to-intermediate level students of a second language, used gestures to solve linguistic and communicative problems, to clarify content, and to assure understanding. Gullberg (2011a:148) notes a quantitative difference in gesture uses between native and non-native speakers, but strategically they all show multimodal behavior whenever some lexical, grammatical, or interactional problem arises: "speech and gestures are essentially equal partners whose relative weights may nevertheless shift at different moments in time depending on fluctuation, ease of expression, and subsequent shifts in awareness and intentionality, and whose internal versus external communicative motivations also shift as a consequence."

Similarly, Mori and Hayashi (2006) observe that gestures accomplish the so-called "embodied completions" (cf. Olsher, 2004), which typically help native speakers find a common frame of reference with their non-native interlocutors. Combinations of words and gestures enable speakers to convey, confirm, and ratify meaning. By assessing their interlocutor's knowledge through speech and gestures, native speakers may reformulate what non-native speakers said or tried to express in words. Native speakers are likely to use expressions that make communication move from an approximate to a more specific phrasing of the ideas originally intended by the non-native speaker. The non-native speaker is consequently exposed to more elaborate and target-like language. It is in this way that embodied completions help non-native speakers notice and learn new and advanced linguistic forms.

The communicative value of gestures is particularly clear when speech is not developed yet or not present at all, as in the case of language learners at different levels of proficiency. The verbal code being inaccessible to them forces learners to use nonverbal aspects of

communication. Gestures, among other nonverbal elements, become more visible and their communicative function can be measured more closely. This is what Church, Ayman-Nolley, and Mahootian (2004) did while working with children who were native and non-native speakers of English. The authors noted that all participants learned much more when exposed to instruction including gestures, particularly gestures that represented the same concepts as speech. Gestures reinforced the meaning expressed by the native speakers, and enabled access to the intended meanings for the non-native speakers. On the basis of this finding, Church et al. (2004) support use of gestures in education and in language pedagogy in general.

Language teaching and learning can draw other important insights from gestures. In reviewing how our hands help us learn, Goldin-Meadow and Wagner (2005) consider two implications from gestural theory (i.e., Kendon, 2004; McNeill, 2005). One is concerned with the speaker and the cognitive effort entailed in the performance of a task. Through gestures, resources are made available for the speaker to handle a task more easily. In addition, the gestural representation of an idea is likely to affect the speaker's learning trajectory. Gestures in these cases reflect and shape thought. The other implication has to do with how interlocutors can benefit from gestures in a communicative exchange. Goldin-Meadow and Wagner (2005) examine the case when gestures express an idea different from the idea conveyed in speech (i.e., mismatched gestures). In the authors' opinion, this is an indication of a transitional state in the speaker's mental processes and it is the moment when speakers are more ready to make progress and learn. Interlocutors who notice those mismatched gestures might change the way they communicate. In class, for example, teachers who glean information about students' understanding, or lack of it, may adjust their verbal language accordingly and, perhaps, decide to use gestures to clarify meanings. Teachers' gestures may encourage learners to produce gestures as well, even by imitation. In sum, Goldin-Meadow and Wagner (2005) argue that the cognitive and communicative functions of gestures can significantly help SLA research elucidate the language acquisition process and the development of skills of different nature in language learners.

One other advancement in SLA originating from gestural theory concerns evaluation of language development and learning. Gesture patterns have been found to reveal insights into whether learners are still thinking according to parameters that pertain to their native language or, rather, they are approaching target ways of thinking. As repeatedly demonstrated in various studies, the languages of the world show different

patterns of "thinking-for-speaking" (Slobin, 1996), which form a framework of reference enabling the expression of events and thought within the lexical, syntactical, and pragmatic possibilities available in a language.

Children develop the thinking-for-speaking characteristics of their own language as they grow up in their community of speakers. Learning another language often means acquiring a different way of thinking-for-speaking. In these cases, one needs to become acquainted with new verbal and nonverbal structures that allow the expression of concepts such as time, space, and motion. Gesture forms, gesture timing, and the encoding of manner and path of motion in gestures have all been found to vary across languages. Stam (2007) claims that the study of thinking-for-speaking patterns across languages, along with the examination of gesture occurrences in synchronization with parts of speech, puts the McNeillian perspective into practice within SLA research. By observing gestures in language learners, scholars can gain an enhanced view into their mind (cf. McNeill, 2005). Gestures enable the visibility and the interpretation of learners' mental representations and learning processes. A much more thorough evaluation of learning stems from the analysis of verbal and nonverbal characteristics in language learners.

Attention to the body in the language acquisition process derives from Vygotsky (1978, 1986) and his philosophy. In first language acquisition, Vygotsky (1986) advocates that it is through gestures rather than speech that children come into contact with the concept of "sign." A child first imitates the gestures of an adult and then gradually understands the communicative intention of those signs (cf. Tomasello, 2003). The process of meaning creation depends on the materiality (i.e., movement) of our actions. Children develop knowledge of things through the actions and activities that they carry out within the cultural-historical contexts in which they are born and live. The content of what children can do first with the help of parents or caregivers, and will be able to carry out by themselves in the future, defines Vygotsky's (1978) concept of zone of proximal development (ZPD).

McCafferty (2002) uses this concept to discuss the potential of gestures in language learning in general. The body assumes a significant role even when one learns a language additional to the first language. Either alone or in collaboration with speech, gestures create ZPDs. McCafferty (2002) advocates that gestures in ZPDs entail a transformation of consciousness and a development of skills. This view finds support again in Vygotsky (1978:42): "in appropriating the resources of the culture through participation in social action and interaction, the individual both

transforms those resources and is transformed in the process." McCafferty (2004) examines the case of an English learner who, in using gestures and space, finds a way to help himself organize discourse and learn language (cf. Slama-Cazacu, 1976). While interacting with a native speaker of English, a Taiwanese speaker maps out the historical relationship between China, Korea, and Japan, and refers back to this virtual map by using gestures. Gestures are for this second language speaker of English a means of thinking and of developing thought (cf. Vygotsky, 1978). On the other hand, the English native speaker cooperates with the learner in this task, also by mirroring his gestures. McCafferty's (2004) study confirms the strong interconnection that gesture establishes with thought and verbal language, whether in the accomplishment of intrapersonal functions (i.e., for the speaker) or in order to maintain interpersonal and communicative functions (i.e., for the benefit of interaction).

Later on, McCafferty (2006) finds that movement and gestures are also important in the acquisition of prosody and syllable structure. One would expect prosody to have nothing to do with action. Yet, McCafferty (2006) notes that the Taiwanese learner of English synchronizes the movements of his hands (i.e., beats) with the separation of words into syllables. Through the up-and-down and back-and-forth beating of his hands, the learner creates visual and material significance of the structure of his words. On the basis of all his findings, McCafferty (2006) argues that SLA should not separate mind and body, the mental and material worlds, but interpret them as interacting with one another on the path to learning and development (cf. Vygotsky, 1986).

With these considerations in mind, it becomes clear that interpreting gestures mainly as a tool that compensates for lack of words, or that helps non-native speakers overcome moments of difficulty in the formulation of target speech, is quite limiting. Research questions in today's SLA studies address much more complex topics, which are particularly engrossing when they consider speakers whose verbal and nonverbal behaviors show an interplay of multiple linguistic systems coming together and participating in the making of meaning (cf. Cook, 1992). Insights from this area of scholarship can ultimately bring more understanding of how thought and mental processes function in humankind.

In general, studies have revealed that gestures are more conservative than speech. Patterns of gestures are likely transferred from one's native language to a target language and are maintained for a longer period of time, even when speech reaches high levels of proficiency. In paying attention to learners' performance, one can observe whether gestural characteristics still pertain to the first language, or whether there is a mix

of two gestural languages, the native and the language in the process of being learned. Presence of gestural characteristics pertaining to a different language has been called "foreign accent" by von Raffler-Engel (1980) and, perhaps more appropriately, "manual accents" by Kellerman and Van Hoof (2003).

Gullberg (2012) claims that gesture studies along with bilingualism and multilingualism should be on today's agendas of research aimed at elucidating the nature of linguistic systems and language use in context. The author identifies three areas of interest. One concerns the relationship between speech and co-occurring gestures and their common conceptual origin. The second area is the extent to which world communities have different gestural repertoires and whether these are determined by cultural convention or linguistic factors. The third area questions whether gestures are learned through imitation and molding or are instead based on linguistic development.

Following Gullberg's (2012) recommendations, this book aims at the examination of gesture perception and interpretation in exchanges that involve people with different cultural backgrounds. In multicultural societies, where the variety of languages within family, work, and social settings can be quite diversified, gesture perception and interpretation are likely to be influenced by the way those languages understand gestures in communication.

Canada offers this type of linguistic scenario. The 2011 census data (see Statistics Canada at www.statcan.gc.ca) revealed that the number of non-official languages in Canada has been increasing in the last few decades. In areas where English is the majority language, speakers with a different mother tongue are likely to show their heritage background while communicating in English. From a gestural point of view, speakers of gesture-rich languages, such as Italian, may produce gestures of their native tongue, or of their interlanguage (Selinker, 1972), or of the target language, more spontaneously than speakers of non-gesture-rich languages, such as Japanese. This trend reflects the function that gestures assume in those speakers' native cultures. In gesture-rich cultures, gestures regularly participate in the creation of meaning.

Differences in gesture uses are also observed in ESL (English as a second language) classes or classes of international languages, in which participants hail from different parts of the world and interpret nonverbal behavior according to their culture of origin (cf. Sime, 2008). It is often noted that communication in class is affected by gesture occurrences. When gestures assume culturally specific meanings, they may be easily misinterpreted. The acquisition of these gestures has been found to

represent a challenge to L2 learners (e.g., Jungheim, 2006). On the other hand, other types of gestures, such as pointing or representational gestures, can help the interaction among the members of a multicultural language class. Language teachers usually rely on gestures while conducting their classes and students become accustomed to the occurrence of these pedagogical gestures.

Having introduced some foundational topics that direct gestural theory in language acquisition and language pedagogy, the chapters that follow are organized in this way. Chapter two focuses on the study of gestures in the acquisition and development of second languages in those settings where the interaction of different languages cannot be ignored. It deals with the multilingual reality of Canadian educational settings, where gestures can expand the concept of multilingualism. By kinetically and visually representing meaning, gestures become one of the languages that constitute multilingualism. The chapter aims to investigate whether gestures can reveal further insights into the experience of learning an additional language when speakers already know a variety of languages. Multilingual speakers have been shown to display a range of behaviors that pertain to their unique and complex linguistic configuration. Chapter two hints at the importance of studying gesture production and interpretation by multilinguals in order to elucidate further their general skills and abilities. The chapter also discusses the need for language pedagogy to account for the multimodal age in which we live today. Daily activities in modern society not only rely on words and written texts. Images are equally important. In language pedagogy, however, speech and written texts have traditionally assumed a privileged position even if research has demonstrated the participation of gestures and other nonverbal aspects in the making of meaning in any interaction. Chapter two advocates the need to acknowledge a systematic position for gestures in language methodologies, techniques, and material.

Chapter three examines the role of gesture in the pedagogy of Italian in Canada. The possibilities that gestures can offer to expand teaching methodologies are discussed. An analysis of official documents and language textbooks of Italian suggests that on paper educators and policy makers claim the necessity to integrate gestures into the pedagogy of second languages. But the reality of L2 classes and textbooks shows a different scenario. Through the integration of gestures, the scope of language textbooks can be expanded, the teaching and learning of nonverbal contents can be promoted, and the very concept of language teaching and learning can become at the same time more multilingual and more multimodal. Chapter three also introduces three research experiences

carried out with L2 learners of Italian at Canadian universities, who were invited to interpret a selection of six Italian emblematic gestures. The chapter examines the characteristics of each study and their results. In particular, the interpretations exhibited by Canadian learners of Italian are discussed in relation to their prior linguistic and cultural knowledge, which offer insights into the experience of multilinguals learning Italian in Canada.

Finally, the concluding chapter, chapter four, offers a number of suggestions deriving from gestural theory. Emphasis is placed on the significance of research on gestures and multilingualism for theoretical innovation and for practical applications in contexts where language classes are composed of speakers of different languages. The chapter ends with two proposals for the inclusion of gestures in the pedagogy of Italian as a second language in multilingual settings outside Italy.

CHAPTER TWO

GESTURES AND THE PEDAGOGY OF SECOND LANGUAGES IN CANADA

2.1. Gestures in language education

Generally speaking, gestures play a meaningful role in class. Teachers use gestures to clarify concepts, to capture students' attention, and to make a class more dynamic and alive. On the other hand, students rely on gestures to help their reasoning, to convey ideas, and to assist their performance of a task. Students are likely to evaluate positively the nonverbal behavior of teachers in class and the effort that a teacher makes in order to be approachable and friendly in class (e.g., Bailey, 1982; Nelson, 1991; Inglis, 1993; Roach, Cornett-DeVito, and DeVito, 2005; Sime, 2006, 2008). Eye contact, for example, is very important in any interaction, including the class setting (cf. Argyle, 1972; Bailey, 1982). Forward body lean is also associated with positive meanings, such as rapport, immediacy, or involvement. Smiling and pleasant facial expressions receive equally good evaluations from interlocutors in different contexts (cf. Burgoon, Buller, Hale, and DeTurck, 1984). Various studies have found that a class accompanied by gestures is more effective than a class without gestures (e.g., Alibali and Nathan, 2007; Church, Ayman-Nolley, and Mahootian, 2004; Valenzeno, Alibali, and Klatzky, 2003). Goldin-Meadow (2004) recommends that teachers make good use of gestures and pay attention to the gestures produced by students. In a language class, gestures may reveal the extent of learners' progress, even when their speech is non-target like. For example, learners may speak in the present tense to refer to actions that occurred in the past. However, they may accompany the incorrect choice of tense with a gesture that clearly locates action in past time. In Western cultures, a hand wave over one's shoulder usually defines time of an action in the past.

Nonverbal immediacy in class and its impact on learners' advancement and interest in learning have been used as concepts of inquiry in studies involving participants from different cultural backgrounds. For example,

McCroskey, Fayer, Richmond, Sallinen, and Barraclough (1996) worked
with learners from Australia, Finland, Puerto Rico, and the U.S. culture.
The authors found that increased teacher immediacy corresponded to
increased affective learning across these cultures. Moreover, they noted
that regardless of the dominant norm in the respective cultures, if the
teacher is comparatively more immediate, students' learning is enhanced.
Similarly, Jenkins and Parra (2003) worked with international teaching
assistants at North American universities and found that those teaching
assistants who engaged in an active use of nonverbal behavior appropriate
to the context and the interlocutors received better evaluations from their
students than those who did not engage in nonverbal uses. Moreover, the
authors noted that teaching assistants whose language proficiency is weak
but who use nonverbal behavior strategically are still capable of negotiating
meaning and engaging with their interlocutors.

    The visual-spatial components that pertain to gestures allow an
immediate representation of contents and work towards reinforcing
meanings. Psycholinguistic theories and related studies support this idea as
they have proved that a more marked trace in memory is left if learning
combines the visual with the motor modality (cf. Clark and Paivio, 1991;
Cohen and Otterbein, 1992; Engelkamp and Cohen, 1991; Nyberg,
Persson, and Nilsson, 2002). The work by Beattie and Shovelton (2007)
can also be cited to corroborate the advantages of combining verbal and
nonverbal language in communication. The authors tested the interpersonal
effects that gestures produce in communication. They considered iconic
gestures, which naturally occur with speech and in combination with
speech, and their link to the reality talked about. Beattie and Shovelton
(2007) found that those gestures are crucial to the overall meaning and
carry over half as much information as the verbal part of the message. In
addition, they convey semantic features such as speed, direction of the
action, the relative position of people or objects, and information about
size and shape. An experiment that involved interpretation of
advertisements by means of T.V., radio, and text alone confirmed the
results in Beattie and Shovelton (2007). The participants in the T.V.
condition gained 40.7 per cent more information than the participants in
the radio and text conditions. Beattie and Shovelton (2007) attributed the
success of T.V. ads not only to the general effects of T.V. per se, but also
to the iconic and metaphoric gestures included. Better than images alone,
spontaneous gestures were able to put core information in the foreground
and effectively promote a message or a product. Unlike speech alone,
speech and gesture together can accomplish communicative objectives
with better results and permit communication to achieve its potential.