LEARNING AND EVALUATION OF NONVERBAL COMMUNICATION IN SPANISH AS A FOREIGN LANGUAGE. THEORETICAL PROPOSAL AND EMPIRICAL STUDY ABOUT EMBLEMATIC GESTURES

The objective and main motivation of this work was to describe and analyze in depth the learning process of emblematic gestures in American students of Spanish as a Foreign Language. From this general objective, in the introduction we formulated a series of research questions that we had, with the purpose of answering them throughout this thesis. Through these pages, we will review and summarize the most important conclusions about the three major sections of the work: theoretical conclusions, conclusions about the empirical research and pedagogical conclusions.

Theoretical conclusions

In the first chapter we started by locating the discipline of nonverbal communication in the field of linguistics. In this regard, we have summarized the main characteristics of nonverbal signs and their functions in communication, based on the studies of Poyatos (1994a, 1994b, 2017) and Cestero (1999, 2004, 2017a). Next, we have summarized the classifications of the previous authors: primary non-verbal communication systems (Paralanguage and Kinesics) and secondary or cultural systems (Proxemics and Chronemics). These have been described from the work of expert authors on this subject. Since the context in which this thesis is framed is the teaching of a 2L/FL (where NVC is the cause of a lot of intercultural differences) we have also presented numerous examples of these differences, both from published works and from the intercultural experience of this doctoral candidate. The relevance and length of this section responds to the importance of including information on all the nonverbal signs that will later be taught in Spanish classes. In fact, in the instruction designed in our experimentation, non-verbal signs have been included from all the communication systems, not only the kinesthetic one.

After this previous conceptualization, we have focused on our object of study, emblems. From the pioneering studies on these gestures (Efron, 1941, 1972, Ekman and Fiesen, 1969), we summarize below a series of characteristics that define them:

- Their emission is intentional and deliberate (Johnoson, Ekman and Friesen, 1975: 335).
- They have a systematic form and meaning, established and known by a social group (Kendon, 1988, Payratò, 2003), that is, they are conventional (Stam and McCafferty, 2008), and cultural gestures (Poyatos, 1994a).
- They may have an iconic or arbitrary coding (Ekman and Friesen, 1969), although Poyatos (2017) prefers to call it intrinsic or arbitrary, and Poortinga, Schoots and Van de Koppel (1993) distinguish between referential and conventional emblems.
- They have an autonomous value of verbal language (Payratò, 2003).
- They can repeat, substitute or contradict any part of the verbal component (Ekman and Firesen, 1969), they occur frequently when the speech is reduced or its verbal realization is not possible (Johnson, Ekman and Friesen, 1975), and they are used independently of the verbal component or together with the latter when the lexical constructions are not sufficient to express what the addresser needs (Kendon, 1988: 135). In our opinion, not only are they used together with lexical elements when these are not enough, or to repeat them, which would contradict the maximum of quantity (Grice, 1975), but, in simultaneity with verbal signs, emblems play a communicative function, for example, by giving emphasis to the message.
- In relation to the above, they fulfill a communicative goal and have an illocutionary force (Payratò, 2003).
- They have a semantic core that can be expressed with one or several words, which can be called *keywords* or *watchwords* (Payratò, 2003).

In the process of bibliographic review of the linguistic configuration of these gestures, we have highlighted that different authors refer to them from different dimensions.

However, one of the conclusions of this work is that a systematization, in which the different contributions to each dimension are related, had not been carried out. This systematization is not only considered necessary from the theoretical point of view, but also to know the linguistic and communicative nature of these gestures in order to carry out well-founded didactic practices. In other words, in order to design a Spanish course to teach these signs, as well as to create an effective evaluation instrument, we needed to know in detail which dimensions are to be taught and evaluated in these gestures. Therefore, our theoretical research questions revolved around the determination of their linguistic typology, their discursive characteristics, their use in conversation, their encoding and decoding properties and their cultural value. Hence, the major contributions within the theoretical section of our proposal are related, as we will see below, to the contrastive classification of the emblems, to the determination of their linguistic and communicative nature, to the proposal of criteria to find their semantic core and to the elaboration of materials for the insertion of these gestures in experimental tests.

The systematic review has been carried out by addressing emblems from different linguistic approaches: pragmatic, sociolinguistic, contrastive and cognitive. In the pragmatic dimension we have collected studies about the different speech acts and communicative functions that emblematic gestures play in communication. Some of the most important findings are those found in the study on Catalan emblems of Payratò (1993), who discovered that the most abundant are the assertive or representative. In addition, he also found that some categories are *emblematized* more easily than others, understanding by emblematization the conventionalization of a corporal action. This happens with the directive emblems (but not the assertive ones), the emblems of interpersonal control and interactive actions. The studies of Kendon (1981; 1983), Poggi (1983, 1987) and Matsumoto and Hawang (2013) have also given us valuable information. These authors have classified the emblems in different communicative functions that fulfill these gestures.

In this sense, in relation to the proposed classification of Poggi (1983, 1987) in holifrastic gestures and lexical gestures, we propose that the same emblem can play more than one communicative function and one speech act in the conversation. For example, /robar/ can serve to indicate that someone is a thief, such that it can be an assertive speech act, or to warn that someone is stealing, which is a directive speech act.

To study the pragmatic value of nonverbal signs, we have started from the research methodology developed by Cestero (2016). From the adaptation of the guidelines of this author, we have established the following code to refer to the emblems: the name of each gesture has been represented between oblique bars (//), the meaning has been delimited with single quotes (''), the different associated lexical units have been marked in italics, and the description of the form has been presented in bold letters. We have also considered it appropriate to include visual support, either as an image of the central part of the gesture, or through a link to a video where it appears and its kinetic realization can be observed.

Next, we approached emblems from a sociolinguistic perspective, since one of our research questions was to find out if there were differences in use of these gestures. Here we have presented papers that include information about the social context in which these gestures are produced, such as age (Saitz and Cervenka, 1972; Ekman, 1976; Meo-Zillio and Mejía, 1980; Martinell, Forment and Vallés, 2002; Nascimiento Dominique, 2008a), gender (Saitz and Cervenka, 1962, 1972, Nascimiento Dominique, 2012), social class (Saitz and Cervenka, 1972; Martinell, 1996), situational and contextual factors (Saitz and Cervenka, 1962; Payratò, 1993; Hamiru-aqui and Allen Chang, 2004), the communicative register (Martinell, 1996) and social distance, including familiarity and hierarchy (Saitz and Cervenka, 1972; Martinell, 1996).

The pragmatic and sociolinguistic factors have been essential when designing the instruction of the experimental part of this thesis, since not only have we taken into account the form-meaning relationship, but we have included activities where students had to reflect on differences in the use of gestures and other nonverbal signs. Likewise, geographical variation has been taken into account, itself related to the sociolinguistic dimension, and inter and intracultural variation. Along general lines we can highlight that:

- All cultures have emblems and there are exclusive emblems of each culture, that is, they vary from one culture to another. In addition, there are cultures that have more emblematic gestures than others (Harrison, 1983).
- Variation may be due to different conventions for the association of form and meaning, to different cognitive processes, to pragmatic differences in

communication (Kita, 2009: 162), to different ways of living and seeing the world in each culture, to national and linguistic borders, to cultural affluence over time, to history in relation to wars and immigration (Matsumoto and Hwang, 2013), and to different symbologies (Morris et al., 1979).

There are multicultural or pan-cultural emblems, that is, those present in various cultures. This pan-culturality exists through cultural contact between geographically contiguous areas (Morris et al., 1979; Kita 2009), through immigration processes (Ekman and Friesen, 1975), and through the media (Ekman, 2004).

In relation to cultural differences, another of our theoretical research questions sought to find what contrastive categories could be determined in order to establish those differences. Therefore, from the works of Poyatos (1994a), Payratò (2003) and Matsumoto and Hwang (2013), we have developed a taxonomy of our own that classifies emblems from the contrastive point of view. This taxonomy allows us to elaborate systematic and rigorous inter and intracultural comparisons. The name of each category consists of two terms, the first referring to the form and the second to the meaning. The categories included are the following:

- Equimorfos-sinónimos: same form and same meaning.
- Equimorfos-sinónimos parciales: same form and a partial synonym meaning (the partialness may be due to semantic factors that directly affect the meaning of the emblem, for example, when an emblem only includes one of the meanings of the other, semiotic factors where the referent of the gesture changes, or sociolinguistic factors, such as age or gender of the addresser).
- Equimorfos-dimónimos: same form and different meaning.
- Equimorfos-antónimos: same form and opposite meaning.
- Cuasiequimorfos-sinónimos: very similar form and same meaning.
- Cuasiequimorfos-sinónimos parciales: very similar form and partial synonym meaning.
- Cuasiequimorfos-dimónimos: very similar form and different meaning.
- Cuasiequimorfos-antónimos: very similar form and opposite meaning.
- Dimorfos-sinónimos: different form and synonym meaning.

- Dimorfos-sinónimos parciales: different form and partial synonym meaning.
- Unimorfos: without equivalence in form or meaning within the comparing language.

We have not taken into account the dimorfos-antónimos and dimorfos-dimónimos categories because these combinations do not share any element of the form-meaning binomial. Therefore, they are not productive for a contrastive analysis where a comparison between two languages or cultures is established.

The creation of this taxonomy has been a very important preliminary step for our experimentation. At this point, we should recall that one of our empirical objectives was to find out the differences in the learning of emblems according to their contrastive typology. For this, we needed to determine previously the categories that could compare these gestures interculturally, and apply this to our research on the Spanish of Spain and the English of the United States. In addition to the usefulness of this work, we consider that this proposal contributes to the creation of a common methodology for the classification and systematization of the emblematic contrast, especially when preparing repertoires and inventories. In this sense, it can be very useful for future work, both for intercultural and intracultural comparison, which can be modified and expanded according to the specific needs of each study.

The last linguistic approach we have taken into account is the cognitive approach. The cognitive nature of emblems is inherent in the fact that they are visual images shared by a community whose meaning has been stored in the collective memory from an experience with the shared world. This explains why many emblems have an iconic form, motivated by the relationship between the concept that is to be transmitted and the resources of the world that surrounds us and those which our body offers us to be able to express ourselves. Thus, in relation to the above, different cultures have emblems with a different form, but with the same meaning (dimorfos-sinónimos); for example, to express 'eat', in Spain the fingers of one hand are directed to the mouth, while in Japan they simulate chopsticks and a bowl.

In order to answer the research question we posed about the cognitive phenomena that a foreign speaker experiences when perceiving and categorizing the emblems of the target language, we have delved into the theory of prototypes. From the works of Rosch

(1978), Langacker (1987) and Kleiber (1995), and establishing a parallelism with cognitive phonology, we call the different gestural realizations that are considered the same emblem *emblematic allomorphs*. Thus, speakers categorize the movements they perceive as members of the same unit if they share the kinesthetic properties with the elements that they have already registered in their experience. In this way, another conclusion of our work is the conception of the emblem around an emblematic prototype: an entity where an intersection of articulatory features typical of an emblem is produced. In this way, each expression of the emblem will have different degrees of prototypicity depending on its approach to that exemplar model. Based on the work of Coleman and Kay (1985) and Kleiber (1995), we have proposed the representation of the prototype emblem from a list of features or continuum whose order responds to the degree of importance and necessity within each category. The shared features of all the emblematic allomorphs constitute the *schema* of the emblem.

From the above and the concept of phonological filter (criba fonológica) (Trubetzkoy, 1973), we suggest the term emblematic filter (criba emblemática) to refer to the process where a foreign speaker applies an involuntary gestural perceptual filter when categorizing the features that configure emblems. From cognitive and cultural models, when interpreting foreign emblems, the foreign speaker seeks common traits with the emblematic repertoire of his or her mother tongue. This filter will be conditioned by the emblematic structure of the mother tongue and the 2L/FL, as well as by the level of mastery of the latter.

This cognitive reflection has opened new lines of research where the perceptive gestural systems of speakers of different languages and cultures could be deepened. We also consider interesting future studies that enquire into the articulatory features of the sets of variants that are grouped around the emblematic prototypes as well as the features shared by the allomorphs of an emblem.

The integration of all the information gathered through the previous approaches (pragmatic, sociolinguistic, contrastive and cognitive) has led us to draw conclusions about the nature of these gestures. In the coding-decoding process, four elements that relate to each other operate intrinsically, participating jointly, dependently and necessarily in its configuration: the form, the meaning, the use (where pragmatic and sociolinguistic aspects take part) and the associated linguistic exponents. This relationship arises as a result of cognitive and cultural models shared by a social group, which enable the emblems' unambiguous identification and, consequently, their value autonomous of verbal language. Therefore, the different realizations of the same emblem, its emblematic allomorphs, must participate in the dependent relationship of the four elements, because if this relationship did not occur, it would no longer be the same emblem, but different emblems that should be analyzed from a contrastive point of view. To represent this correspondence in a visual way, we have created a figure (see page 103) that may also be used to make systematic and complete cultural comparisons. Through the information given in each of the four elements, gestures can be properly classified within the contrastive taxonomy proposed above.

It is also important to point out that the dependent relationship between the four elements is not univocal, since different linguistic exponents can be found for the same emblem. This univocity has been what motivated the empirical approach to the study of these gestures: the fact that there are different lexical units associated with the same emblematic gesture has raised the question of which to choose as a denomination. Answering this question was of special relevance to our investigation since that is how the emblems of our instruction would be denominated.

Therefore, we considered it essential to carry out a search and selection process to determine the emblems' semantic core. This semantic core must include the main meaning and cover as many communicative functions which may be developed by each gesture as possible. Not choosing a single unit as the denomination of all the possible ones would have led us to heterogeneity and confusion when referring to these gestures.

From research models for non-verbal signs (Payrató, 1993, 2001; Ueda, 1998; and Cestero 2016) we have proposed a list of non-excluding methodologies to determine the semantic nucleus in the most precise and systematic way possible. This methodology has been applied to find the semantic core of the emblems included in our experimentation, and may be used in future studies with the same purpose. Next, we detail the constitution of each methodological criterion.

• Iconicity Analysis: this criterion seeks a direct relationship between the shape of the emblematic gesture and the associated lexical units. For example, for the emblem meaning 'estar a dos velas', the unit a dos velas has a greater iconic relationship than the exponent no tener dinero. As we have emphasized supported by cognitive reasons, this criterion is the most important since, in these gestures, a mental association between the meaning and the direct form is produced with the experience of the world that surrounds us. However, it cannot be applied to emblems with arbitrary coding. Thus, these gestures can be classified into three categories according to their degree of iconicity: high (for example, /comer/), medium (for example, /me parto/, in which it can be interpreted that the body is being split in two by hitting the abdomen) and no *apparent* iconic relationship (for example, /mucho/).

- Language Dictionaries: the second proposed criterion is the search of the lexical units in language dictionaries to know their precise meaning, to establish comparisons between the meanings of the different linguistic exponents associated with the same emblematic gesture, to obtain information about their linguistic mark and to check if the associated emblem is included in the definitions or examples. For this work, we have consulted five dictionaries: Diccionario de la Lengua Española -DLE (RAE and ASALE, 2014)-, Diccionario de Uso del Español. María Moliner -DUE (Moliner, 2007)-, Diccionario del Español Actual -DEA (Seco, Andrés and Ramos, 2011)-, Diccionario Salamanca -DS (Pascual and Guitérrez, 2006)-, and Diccionario de expresiones y locuciones del español -DELO (Martínez López and Jørgensen, 2009).
- Experimental studies: this criterion establishes the elaboration of methodological proposals where the recognition and denomination of the emblems by native speakers are analyzed. In this line, we have developed a questionnaire where 288 native speakers of Spanish have proposed the name of the gestures after a visualization where each gesture appeared in isolation and without sound.
- Analysis of kinetic inventories: another criterion for determining the semantic nucleus is to consult previous works such as inventories, repertoires and dictionaries of Spanish gestures to observe which lemma they have chosen to present each emblematic gesture. For our study, we have analyzed all the inventories found on gestures of Spanish: Colombian and North American

Gestures. A Contrastive Inventory (Saitz and Cervenka, 1962), Handbook of Gestures: Colombia and The United States (Saitz and Cervenka, 1972), A Gesture Inventory for the Teaching of Spanish (Green, 1968), Diccionario de Gestos. España e Hispanoamérica (Meo-Zilio and Mejía, 1980, 1983), Diccionario de gestos con sus giros más usuales (Coll, Gelabert and Martinell, 1990), Pequeño Diccionario de Gestos Hispánicos (Takagaki, Ueda, Martinell and Gelabert, 1998). Diccionario de gestos españoles (Martinell and Ueda, n.d.), Emblemas gestuales españoles y brasileños: estudio comparativo (Nascimiento Dominique, 2008a) y Diccionario de Gestos Españoles (Gaviño Rodríguez et al., 2012). In this analysis we have found that only two emblems are included by the nine inventories (/dinero/ and /mucho/) and that the lemmas with least variability in their denomination are /comer/, /cuernos/, /pillarlo/ and /me parto/. In the case of the last two, this occurs because they are only present in one inventory, and as a consequence they are the only lemma collected.

Along with the procedures described, we also propose the analysis of audiovisual corpora of conversations among natives. However, this approach would fall within the line of analysis of audiovisual corpora and entail the elaboration of a specific methodology that lies beyond the limits of this work. Therefore, this is the only criterion that has not been put into practice in determining the semantic core of the emblematic gestures in our research. The combination of the four methodologies previously exposed has resulted in the denomination of the 25 emblems incorporated in our experimentation. In addition, this proposal can benefit the general research community. The recordings of the emblems are easily accessible through the links provided in Annex I, so they can be used in subsequent experimental studies.

After this approach to emblems from the theoretical framework of non-verbal communication, the second chapter is focused, from applied linguistics, on the teaching of nonverbal signs in Spanish classes. This chapter has been essential in designing and carrying out our instruction based on methodological-didactic models suitable for the learning of the NVC. First, we have conducted a search for the presence of nonverbal signs in the curricular approaches of the Council of Europe, Instituto Cervantes, ACTFL and NCSSFL.

From the Council of Europe we analyzed the CEFR in the volumes of 2002 and 2018. In 2002 we found that the NVC system with the highest incidence is Chronemics and, within this, the nonverbal signs related to turn-taking. In the volume of 2018, the most frequent nonverbal signs present are those that serve as a communicative strategy to compensate linguistic limitations of the initial levels. In none of the volumes have references to emblems been found.

In line with Cestero (2007), from the analysis of the PCIC (Instituto Cervantes, 2006) we conclude that in the inventories Gramática, Pronunciación y prosodia, Funciones y Géneros discursivos y productos textuales, the signs belonging to the primary NVC systems (Kinesics and Paralanguage) are present on more occasions than secondary or cultural ones (Proxemics and Chronemics). In addition to the inventories treated by Cestero (2007), we have analyzed Tácticas y estratégicas pragmáticas, where we have found that paralinguistic signs have been included, although we have found an implicit reference to Interactive Chronemics. In the inventory Saberes y comportamientos socioculturales, we have observed that Kinesics, Interactive Proxemics and Paralanguage are repeated in signs that intervene in social conventions of interaction. In the inventory Habilidades y actitudes interculturales, we have observed a greater presence of kinesthetic and proxemic non-verbal signs.

In this way, we have concluded that the inventories of Saberes y comportamientos socioculturales and Habilidades y actitudes interculturales include the NVC more than those dedicated to Gramática, Pronunciación, Funciones and Géneros discursivos y productos textuales. Regarding the presence of emblems, only two explicit references have been found (in Saberes y comportamientos socioculturales and Habilidades y actitudes interculturales), which has led us to point out the lack of attention to these kinesthetic signs in the PCIC. Therefore, we consider it necessary that, in addition to broadening their incorporation into the two inventories where they already appear, they should be included in Funciones y Tácticas y Estrategias pragmáticas, since one of the characteristics of these gestures is their plurifunctionality. In addition, also because of their indisputable relationship with the verbal content, specifically with the lexicon, it is essential to include them in *Nociones generales* and *Nociones específicas*.

Regarding ACTFL and NCSSFL, curricular maps of the US context, we have analyzed their main publications: Actfl Performance Descriptors for Language Learners (ACTFL,

2012; 2015), Can-do statements (NCSSFL-ACTFL, 2012; 2015), Intercultural can-do statements (NCSSFL-ACTFL, 2014), NCSSFL-ACTFL can do statements (NCSSFL-ACTFL, 2017), 21st Century Skills Map (ACTFL-P21, 2011) and Language Educator (ACTFL, periodical). After an exhaustive search of these documents, we have confirmed that the NVC is not systematically collected, although it appears on several occasions in the examples for the different learning indicators. At the beginner level we have found that Kinesics, specifically gestures, is included as a strategic resource for communication. There are non-verbal references at all levels: the majority belongs to the chronemic system, followed by the proxemic and the kinesthetic ones. Paralanguage, on the other hand, is practically non-existent. In addition, we have verified that there are explicit references to the NVC in general, however, at no time is its constitution explained, what elements form it or how it may be included it in different linguistic programs. As for the object of study of this thesis, we can point out that we have not found any explicit reference to emblems, although it can be interpreted that in the references to characteristic gestures of a culture reference is made to this type of gestures.

Thus, one of the conclusions of this work is that NVC is not systematically included and reflected along curricular approaches and, moreover, the work with emblems is especially absent. For this reason, we advocate a necessary incorporation, since they serve as a baseline for the creation of programs, textbooks and didactic materials. As Cestero (2017b) points out, the absence of a common base is probably one of the reasons why the NVC is not included in a meaningful learning process in the majority of the teaching materials to date in the market.

Next, we have looked further into non-verbal signs within the different communicative competencies. Non-verbal signs should be taught taking into account the processes that are developed in intercultural competence: accepting that individual practices are influenced by culture and that there is no single way to act correctly; valuing the immediate and other cultures; using previous cultural knowledge as a resource to learn about new cultures; and finding a personal and cultural style and identity (Liddicoat and Scarino, 2013). Furthermore, in order to be interculturally competent, the maternal culture and the target culture must be related, compared and interpreted. Strategies that allow contact between different cultures and act as cultural intermediaries should be employed.

Given the importance of culture in non-verbal signs, to be interculturally competent, students must necessarily be non-verbally competent. We have explained this competence through three categories: cognitive, in which the non-verbal knowledge of Spanish and the cultural values that non-verbal signs possess are reflected; affective, where positive attitudes towards these signs appear and, consequently, uncomfortable situations, prejudices and stereotypes are avoided; and behavioral, where the acquired knowledge and strategies are put into practice to be able to establish differences between cultures and act as mediators if misunderstandings produced by NVC arise.

Next, we have discussed the NVC in sociolinguistic, pragmatic and discursive competencies. In Pragmatics, the use and interpretation of the meaning of nonverbal signs must be practiced in different speech acts. This not only implies decoding their meaning, but also carrying out inferential processes that allow the interpretation of the communicative intention. The sociolinguistic competence must be taken into account from two perspectives: the diaphasic one, since the relationship between the interlocutors and the degree of formality will mark the type of gestures, ways and body contact in the interactions, and diastratic, since factors such as gender or age will define the use of certain non-verbal signs. Regarding the discursive competence, we have highlighted the role of Interactive Chronemics (especially regarding turn-taking) and Kinesics (in particular, gestures such as *batons* and *regulators*).

Later, we have gone further into linguistic competence, specifically the grammatical, the phonic and the lexical-semantic. Within the grammatical may be considered deictic, time-marking and space-marking gestures. In the phonic, we have explained the relationship between the Paralanguage and the phonic component, where we have spoken of "non-verbal phonology" (Crystal and Quirk, 1964). In the lexical-semantic, we offer that the theories about the lexical learning and the configuration of the mental lexicon should be exploited in studying the learning of the emblems and, thus, to serve as a base for the didactic methodology to be carried out.

The last competence we have discussed is the strategic one. It is shown that the use of illustrative gestures has a positive impact on the learning and memorization of the lexicon (Engelkamp and Krumnacker, 1980; Cohen, 1981; Saltz and Donnenwerthloan, 1981; Cohen and Stewart, 1982; Bäckman and Nilsson, 1984; Helstrup, 1984; Kauser et al., 1986; Feyereisen, 2009; Kelly, McDevitt and Esch, 2009; Macedonia, Muller and

Friederici, 2011). In addition, different authors argue that the use of gestures in a foreign language serves as a compensatory strategy of linguistic limitations, as well as reinforcement, support and corroboration of verbal content (Faerch and Kasper, 1983; Sainsbury and Wood, 1997; Gullberg, 1998; Nobe, 2001; Hadar, Dar and Teitelman, 2002; Fernández López, 2004; Sherman and Nicoladis, 2004; Yoshioka, 2005; Cohen, 2011; Macedonia, Muller and Friederici, 2011). In this regard, we have warned about the use of emblems as an intercultural communicative strategy: although their meaningform association is direct and does not entail ambiguities in the mother tongue, this relationship may not occur in the target language, so only the (cuasi)equimorfossinónimos and the unimorfos with a clear iconic relationship between meaning and form will contribute strategically to communication.

This path through communicative competencies leads us to extract another of the conclusions of our work: the NVC appears transversally in all of them and, therefore, must be present when designing and creating teaching materials so that students acquire a complete communicative competence of the 2L/FL.

Next, we have gone deeper into the didactic methodology for the teaching of the NVC in Spanish as a Foreign Language. The works on the integration and level placement of non-verbal signs (Forment Fernández, 1997; Cestero, 2004, 2017; Cabañas Martínez, 2005; Méndez Guerrero, 2016; and Poyatos, 2017) agree that criteria such as functionality, frequency of appearance and difficulty should be followed. In addition, we emphasize that non-verbal signs should be integrated into a meaningful process where they appear progressively and allow the reorganization of those already acquired in order to assume the new ones by establishing cognitive bridges (Méndez Guerrero, 2016). In this regard, we emphasize the importance of retrieving the different nonverbal signs throughout all levels of learning. Likewise, we think that the teacher must play a transcultural role, apply the theory of discovery for NVC learning and take advantage of non-verbal cultural misunderstandings as a pedagogical tool in the classroom.

Regarding the didactic progression, we agree with the Cestero proposal (2004): (1) presentation, explicit or implicit, (2) closed practice activities directed by the teacher, (3) semi-closed and directed reinforcement activities and (4) semi-directed, open and interactive activities to achieve the acquisition. Along with the stages established by Cestero (2004), we consider it appropriate to add evaluation activities as a final stage,

where the learning of non-verbal signs can be verified and measured. Given the lack of attention found in works about NVC, we have proposed a series of criteria to evaluate nonverbal signs. In the first place, the assessment must be carried out in accordance with the different intercultural skills (cognitive, behavioral and affective). In addition, different types of assessment must be taken into account (holistic/analytic, direct/indirect. performance/knowledge, continuous/at specific a time. formative/summative, self-assessment/by others), which must be combined to obtain a complete evaluation in the identification and production of nonverbal signs. We also consider that the NVC can be evaluated within the different oral skills: comprehension (where we have emphasized that nonverbal signs should be assessed in both auditive and audiovisual comprehension), mediation, and expression and interaction.

In the latter, we have analyzed DELE exams, where we have found few references to NVC. Interactive chronemic and paralinguistic elements are mentioned occasionally, while Kinesics and Proxemics never appear. This is explained by the limitations of the test: the speakers are seated, without freedom of spatial movement. Moreover, it is difficult for the foreign speaker to forget that he/she is talking to his/her examiner and resorting to the tactile behavior that would be habitual in a conversation between real friends. The last consideration on the evaluation in this chapter has been the need to create rubrics (scales, grids or checklists) for the holistic evaluation of oral production, where the NVC should also be included, as well as for the analytical evaluation of the non-verbal signs.

Because the experimentation is done with students from the United States, we have collected the non-verbal differences between this country and the Spanish-speaking countries. This has allowed us to conclude that there are differences in all NVC systems, that is, Paralanguage, Kinesics, Proxemics and Chronemics. Moreover, due to the diversity of origin of the US population, another important conclusion is that the identity characteristics of the students should be taken into account, which can condition their knowledge, behaviors and affective skills towards the NVC. We highlight this for students of Spanish as a Heritage Language, since the fact that they do not recognize certain non-verbal signs or do not identify with them may encourage their insecurity and frustration in not responding to what a Latino should know or do. To date, no work has been located to study non-verbal signs in this group of students, so one of the lines of research that could follow this thesis would be non-verbal competence in SHL learners and the comparison between learning in these students and SFL learners.

The second chapter has been concluded by collecting the few studies that have investigated the learning of the NVC and emblems in the classes of 2L/FL (Jungheim, 1991, 1994, 1995, O'Shullivan, 1995, 1996) and studies that measure the identification of emblems in native speakers and speakers of an 2L/FL who have not received a prior instruction on these non-verbal signs (Jungheim, 2008; Salvato, 2011). This scarcity of studies leads us to conclude an existing lack of attention to the empirical research of NVC and, more specifically, of emblematic gestures. In the consulted publications, in addition, we have found incomplete information that has prevented us from carrying out a complete analysis of the investigations. However, we have located different types of tests that can be applied to the evaluation of emblems. The two main conclusions we draw about the analysis of these tests and that we will take into account for our experimentation are the following: (1) multiple selection is an objective test of indirect evaluation that allows the effective measurement of whether the student has understood or not the meaning of the emblem. In this type of test, it is more appropriate to use a video than an illustration, since an emblem is formed by different parakinetic qualities (speed, movement, number of repetitions, etc.) that cannot be observed in an illustration; (2) role-plays are very useful activities for a direct evaluation of production, although it is important to bear in mind that, in order to evaluate specific non-verbal signs, situations that encourage the use of non-verbal signs that want to be evaluated should be considered.

Conclusions on empirical research

The main objective of this second section of the doctoral work was to know in depth the underlying processes in the learning of emblems in students of SFL. We designed a within-subjects quasi-experimental study with a pre-test, a period of instruction and a post-test. The instruction consists of nine classes divided into three modules with a final task in each of them. In addition to twenty-five emblems of the variety of Spanish in Spain, the instruction includes non-verbal signs of the different systems of NVC, although in the pre-test and the post-test we have only collected data on emblematic gestures.

Twelve of the emblems present in the instruction have been incorporated into the test, classified into three typological categories: common (equimorfos-sinónimos), different (dimorfos-sinónimos and dimorfos-sinónimos parciales) and unique (unimorfos). It is formed by four sub-tests: the first consists of an interaction in pairs through a role-play activity where the free production of the emblems is evaluated; the second is a kinesthetic-dubbing in pairs of a conversation where students can only use gestural language; the third consists of a visual comprehension where students must identify emblems in context; and in the fourth, after a projection of a video where the emblems appear separately in sequences, students must identify them in a multiple choice activity.

From the research questions that we formulated before carrying out this research, we present below the most important conclusions drawn from the quantitative analysis.

Q1. Can emblems be learned in a non-immersion context?

The first research question we have formulated in the introduction is whether the emblems can be learned in a non-immersion context, for which our hypothesis was "yes". Although this question could seem very obvious, no previous research that evaluated the learning of these gestures after an instruction like the one we have designed for our study –with different oral skills (production and identification) taken into account and different types of emblems according to their contrastive typologywas found. This was the cause of not assuming that the students were going to improve from pre-test to post-test.

The quantitative analysis has confirmed the hypothesis, since the difference between the data obtained in the pre-test and in the post-test has been significant, with higher means in the post-test. This has occurred not only in the total results, but also in the three types of gestures: common, different and unique. Thus, we determine that emblematic gestures can be learned by university students of SFL in the United States.

Q2. Does the type of assessment test influence the observation of the learning?

Our hypothesis was that different evaluation tests measure different types of control and knowledge: free production tests can measure both procedural and declarative control and knowledge, while those of guided and closed production can only measure declarative knowledge and control. Comprehension, whether free, guided or closed, can only measure declarative knowledge.

In order to accept or reject the hypothesis, we have separately analyzed the results in each sub-test. In this analysis, we have observed a significant progress from pre-test to post-test both in production and in comprehension activities. Likewise, we can confirm that there has been a progress in the three types of practice: free, semi-controlled and controlled, without a significant difference between them. We have verified that in none of the sub-tests have the results evolved to a greater or lesser extent than in the others, and that in all there has been some progress or improvement.

However, in the individual analysis of the pre-test and post-test data we found that in test 1 there were fewer correct responses compared to tests 2, 3 and 4. Even so, the difference in the progress between tests shows no significant results, as the number of correct responses in test 1 is continually lesser than those of the other tests in both preand post-tests. We have found two possible explanations for this result: the first, the type of practice of the test 1, since it is a role-play where students choose the linguistic content of their production, so the communicative function of the activity can be perfectly fulfilled without the need to use emblems (in fact the instructions of this test do not indicate at any time that they must include gestures); and, the second, the type and time of interaction, since we cannot assure that in a real interaction between native speakers there were at least 6 emblems per person, the number of gestures that are included in the subsequent tests.

The previous results allow us to conclude that the nature of the sub-tests is different, since each one measures the emblematic competence from a different perspective. Here are some conclusions about the nature of the four sub-tests:

Test 1 (free production)

The main advantage of test 1 is that it allows us to evaluate the production in an interaction as real as possible. The four dimensions of the emblem can be observed: form, meaning, use and linguistic exponents. It also permits the analysis of the relationship between lexical and emblematic competence. In this regard, we propose the possibility of using this test in future investigations in order to verify if the practice of emblematic competence has repercussions in the lexicon. This could be done through a

comparison of an experimental group, where the emblems are included within the instruction, and a control group, in which only the lexical units are taught. However, it is important to point out that if in the sample of language obtained through this interaction students do not use emblems, this does not mean that they have not learned them, but that at that moment they have not considered it necessary to use them to communicate. Furthermore, it will be difficult to measure the procedural knowledge of emblems, since it is difficult to determine whether the participants produced the emblems unconsciously as part of their new acquired code or if they produced them as a result of the emblematic metalinguistic-emblematic awareness.

Test 2 (semi-controlled production)

Unlike test 1, in test 2 students must produce emblems for lexical units that are already offered, so it is easier to measure if they have learned the emblems compared to test 1. However, as this is not a real interaction, only two linguistic dimensions of these gestures can be measured: form and meaning. In addition, although students are intended to double the conversation with as many emblems as possible, instructions only specify that they must dub it with gestures, which may provoke the use of gestures that are not necessarily emblems, but that can be associated iconically with the same lexical units.

Test 3 (semi-controlled identification)

In this test the visual comprehension of emblems in context is evaluated. The main advantage of this test is that students observe these gestures within a conversation in a real situation. However, it must be borne in mind that the fact of giving students freedom in the text can give rise to ambiguous answers that hinder the analysis of data.

Test 4 (controlled identification)

This test also evaluates visual comprehension, in this case in isolation and through multiple choice. In this selection options are offered, so the answer cannot be ambiguous as happened in test 3. The fact that emblems appear in isolation can be considered a limitation, since important information content is missing for decoding, such as the pragmatic, discursive and contextual values.

Thus, we conclude by pointing out that we cannot affirm our research hypothesis, since we cannot confirm that test 1 is used to measure unconscious control and knowledge. However, the four tests are used to evaluate learning, control and conscious knowledge. As we will present in the conclusions of the pedagogical section, to evaluate acquisition, control and unconscious knowledge, another type of evaluation is required. This assessment must be formative and not summative as is the case of this test.

Q3. Is there a learning difference in the emblems according to their contrastive typology?

The third question that we have posed has been whether there is a difference in the learning of emblems according to their contrastive typology. Under that question, we have developed two hypotheses: the first, that emblems with a correspondence in form and meaning between the mother tongue and the target language (i.e., the *common* ones) will have a lower progress than those that do not possess that correspondence (this is, different and unique). In the global results, not divided by tests, this hypothesis has been confirmed, since the difference in the total progress of *common* emblems has been less than that of *different* and that of *unique*.

To further enquire into the previous question, we have also analyzed the progress of the different types of emblems in the four tests that form the pre-test and the post-test. In test 1 we found that in the three types of emblems there has been progress from pre-test to post-test, and that progress is not significantly different in the three types, so the first hypothesis of this question is rejected in this test 1. In tests 2, 3 and 4, however, there has been some progress for the *unique* and *different* emblems but not for the *common* ones, so in these tests the hypothesis is accepted. This can be explained by the type of emblem and the type of test: in tests 2, 3 and 4 it is specified that students must identify or produce gestures, so, in the pre-test, students used emblematic gestures present in their mother tongue, that is, the common ones, strategically. However, in test 1 the content produced by the students is free, so they do not need to include these gestures to respond to the instructions of the test and fulfill its communicative objective. These results can also be explained by the ceiling effect: means in test 2, 3 and 3 are very high in the pre-test, so their improvement capacity diminishes. In other words, the participants' performance in these tests is too good to find differences based on the experimental conditions established in the comparison of the pre-test and the post-test.

The second hypothesis that we put forward for this question was that, due to linguistic interference, emblems that have a different form in the mother tongue and the target language but share the meaning (that is, what we have called different and that encompass the categories dimorfos-sinónimos and dimorfos-sinónimos parciales) will have a lesser progress than those that have neither the form nor the meaning in common in the mother language and the foreign language (unique, that is, unimorfos in our contrastive taxonomy). This hypothesis has been rejected, since there has not been a difference in evolution between different and unique emblems, neither in the overall results nor in those obtained in each of the tests. We tried to explain this result through the linguistic domain of the participants: since they have a high level, they do not need to make as many comparisons with their mother tongue as at the lower levels, so the linguistic interference will also be diminished. Future works that could explore more deeply in this regard would be interesting.

Q4. What factors influence the learning of the emblems?

In order to answer this question, we have carried out a second analysis where we have included independent variables, that is, we have looked for external factors that could have influenced the learning of the emblems. In the first place, we have taken into account the age, gender, level of Spanish, absences from class and if students had been in a situation of immersion. Of the above, only the variable immersion has been significant in the progress of *common* emblems: students who have been immersed in a Spanish linguistic context have progressed less than those who have not. In the comparison of the individual results of the pre-test and the post-test we have discovered that the group that has been in immersion has a slightly higher average of correct answers in the pre-test than those that have not been in immersion while in the post-test the opposite happens. However, we have indicated the lack of information about the immersion situation of these students in drawing firm conclusions. Therefore, research should be conducted to assess the incidence of immersion contexts in NVC learning, where it could be ascertained if students increase sensitivity to it or if they really experience and assimilate it.

In any case, the fact that only *common* emblems have had a significant difference in progress, indicates that emblematic non-verbal competence must be trained in the classroom: not only are implicit practice and knowledge important, but an explicit methodology must also be part of the instruction to acquire that emblematic non-verbal competence in general, and an emblematic metalinguistic awareness in particular.

The fact that there have not been significant results in the other variables may be due to the homogeneity of the participants. In the case of the level of Spanish, despite the fact that the group ranged from B1 to a C1- levels, we do not have subjects with all the levels collected by the CEFR (Council of Europe, 2002: 23-43). Therefore, in future research, it would be interesting to compare the acquisition of emblems in ELE classes of different levels, from A1 to C2. Regarding age, the students were between 18 and 20 years old, so it would be advisable to replicate the study with subjects of different ages.

The previous results have led us to a second phase of independent variables. Thus, we have considered cultural exposure, intercultural sensitivity, multiple intelligences and learning styles. From this analysis we highlight the results in kinesthetic intelligence: the subjects that possess this intelligence as one of their three main ones have evolved more than the subjects without it, both in the global results and in each type of emblem. In addition, this kinesthetic intelligence has not only influenced the active domain, but also declarative knowledge. We have connected this to the possession of cognitive skills related to movement. However, in the pre-test students with kinesthetic intelligence have not obtained more correct responses than those without. Therefore, one of the conclusions of this work is that for kinesthetic intelligence to show its potential, it must be trained and developed through different activities as we have done throughout our instruction.

To better understand the characteristics of these students, we have consulted different works (Gardner, 1983, 1999; Nolen, 2003) where the development of motor skills to produce precise movements and the ability to face the world through movement is highlighted. Although we have not been able to locate any empirical study that relates this kinesthetic intelligence to the learning of non-verbal communication, there are works where emblems are suggested as an element to work the kinesthetic intelligence in the 2L/FL classes (Tomlinson, 1999; Schewe, 2002; Arnold and Fonseca, 2004). In addition, there are authors who point out that the motivation of students can be enhanced by activities in which the possessed intelligence is involved (Schumann, 1988; Jacobs and Schumann, 1992; Lorenzo Bergillos, 2004). From these works, we have gone more deeply into the motivation in 2L/FL classes: several studies indicate

that motivated students achieve better results in the development of their skills (Kleinmann, 1977; Purcell and Suter, 1980; Moyer, 1990; Gardner and MacIntryre, 1991; Kasper and Schmidt, 1996; Guthrie and Wigfield, 1997; Al-Hazemi, 2000; Lozano Fernández, García-Cueto and Gallo Álvaro, 2000; Laufer and Hultsijin, 2001; Robinson, 2001; Tercanlioglu, 2001; Al-Otaibi, 2004; Melendy, 2008). In addition, neurolinguistic studies show that certain brain areas are activated and mobilized when an interesting linguistic input occurs or satisfactory learning situations occur, producing mental mechanisms of acquisition such as memory, attention or strategies (Caine and Caine, 1999). In our experimentation, kinesthetic intelligence has been developed through the practice of emblems and other gestures, as well as through the dynamization and content of various activities.

These results have also led us to consider the *Total Physical Response* (Asher, 1977, 1995), a theory that maintains that the memorization of the elements of the language is favored by the association with motor activities through the stimulation of the kinesthetic-sensory system of students. In this regard, we have raised the need to investigate in the future the difference of learning of lexical units through an instruction in which they work with emblematic gestures, and another in which it is done without them.

Another of our reflections from the results obtained is the consideration of *differentiated instruction*, which advocates starting from the competence that the student possesses and adapting to their needs and particular characteristics. Within the latter, it considers multiple intelligences as one of the factors that must be assessed to adapt to different learning modalities (Tomlinson, 1999). From these methodological considerations, differentiated instruction could be used at certain moments of instruction, where students could follow different paths to achieve the common objectives of an activity. This would also encourage cooperative learning, since students would work in different roles, all necessary and important, to achieve a shared goal. The differentiated instruction has led us to propose future studies where the impact that this methodology could have on the learning of emblems or other non-verbal signs could be observed.

At this point, it is important to remember that the analysis developed is not without limitations, so it will be necessary to replicate it with a larger sample of participants and, now that we are aware of the main advantages and disadvantages of each of the

tests used, its design should be adapted to the purpose of new research. However, we believe that our contribution can be a relevant starting point when developing studies on the learning and evaluation of emblematic gestures.

Pedagogical conclusions

Although throughout the previous sections we have outlined some conclusions that would necessarily fall within a pedagogical section, we will now delve into the contributions of this thesis to support didactic practices in the teaching of emblems.

In addition to the findings related to the research questions, after the development of the experimentation we have realized that there are two aspects that deserve further study: self-evaluation and emblematic interlanguage. Since this analysis did not form part of the objectives of this thesis, a complete methodological instrument was not planned on which to perform a quantitative analysis. Nevertheless, we have carried out a descriptive analysis that has helped us to better understand the mechanisms underlying the learning of emblems and non-verbal signs.

The analysis of the self-evaluation has contributed to an introspective approach of the students' learning. The three main conclusions that we extract from this descriptive analysis are the following: (1) in the three intercultural skills (cognitive, behavioral and affective), students feel that they have a high level of ability, but the development of behavioral skills has presented them with greater difficulty than that of cognitive; (2) one of the greatest difficulties and insecurities experienced has been that related to factors of contextual adequacy in interaction, such that the activities where the social use of non-verbal signs is developed should be expanded and reinforced; (3) the degree of satisfaction that students feel about their learning is high: their communication needs have been met and they are satisfied with their learning, the level of Spanish, the timing and the role of the teacher have been adequate, and their interest and self-learning of Spanish language and cultures, inside and outside the classroom, has been developed and enhanced.

It is important to remember that they completed the self-assessment only after the instruction, so the analysis could only be done by comparing the different parts,

intercultural skills and communication systems included in the items of the selfassessment. For the future, it would be interesting to replicate the experiment by adding the same self-assessment before starting the instruction. Then, we would be able to compare the results before and after, in the same way we have done with the pre-test and the post-test.

The second descriptive analysis, that of the emblematic interlanguage, has been developed from the post-test recordings and the notes taken throughout the instruction while the learning was taking place. The objective of these notes was the documentation of relevant aspects and students' difficulties for future adaptation of instruction and for the creation of SFL courses where non-verbal signs are taught. The main conclusions of this descriptive analysis are the following:

- The existence of an emblematic interlanguage is confirmed. Mistakes affect the four elements that configure the nature of emblems: use, meaning, form and associated linguistic exponents. Modifications that affect any of the four dimensions are perceived by native speakers as errors.
- Mistakes can be classified according to their typology: transfer, omission, hypergeneralization, overcorrection, simplification and overproduction, which can be considered communication and learning strategies. Besides these, errors of kinesthetic control appear related to the mechanisms that intervene in the perceptive and production system.
- A series of learning stages can be established in identification and production skills: detection, association and relation, and discursive contextualization.
- This error analysis and the consultation of works on the interlanguage in a 2F/FL has allowed us to outline a series of pedagogical considerations that should be taken into account in didactic practices:
 - i. The fact that some mistakes continue to appear as part of students' interlanguage does not mean that they have not learned the contents that have been worked on.

- ii. Mistakes are necessary and valuable, since they are showing us that the learning process is taking place. They also allow us to focus the activities according to the needs of the students at all times.
- iii. Since the interlanguage has an idiosyncratic component, we must individualize the attention to each student's errors.
- iv. It is very important to take into account students' mother tongue, as well as other second languages or foreign languages, in order to understand the transfer and the emblematic filter. It will be very useful to create contrastive materials.

This interlanguage analysis raises the need to develop future studies in this field that allow us to access the cognitive and sociocultural processes that determine the learning of emblematic gestures. Thus, systematic studies could be designed to delve into each emblem's dimension (form, meaning, use and linguistic exponents) and rigorously define and explain the typology and the causes of the mistakes. These studies would support didactic practices. In addition, it would be interesting to investigate where the emblematic interlanguage and the lexical interlanguage are related, since several of the errors found were in the lexical units associated with emblems.

All the new lines of research arising from the quantitative and descriptive results obtained are a consequence of the inquisitiveness to continue the investigation of nonverbal signs. More empirical attention is required to understand and explain the process of learning and acquisition of emblems in Spanish as a Foreign Language classes.

From these results and the theoretical reflection exposed throughout this thesis, we have presented a series of considerations on the teaching, learning and evaluation of emblematic gestures. They have allowed us to answer the research questions that we formulated in the introduction around the pedagogical objective of this work. We expound the main conclusions of this pedagogical reflection:

• Differentiated instruction, in addition to being applied around factors such as multiple intelligences, should also be taken into account in terms of students' intercultural and emblematic competence, and of the type of language learning (SFL or SHL). In addition, it is important to start from the cognitive, behavioral and affective abilities that students possess in order to be able to elaborate a complete and consistent instruction in accordance to their needs.

- The relationship between emblematic and lexical competence must be taken into account in the teaching procedures. In this regard, we have talked about the similarity in the cognitive processes that occur when learning a new lexical unit and a new emblem: as part of the mental network where the categories that allow us to name the world are organized, gestural forms are stored along with the words and lexical units in the lexicon. Therefore, these gestures should be integrated with the rest of the linguistic-cultural elements, establishing paradigmatic networks around the semantic fields of associated linguistic exponents.
- Emblems should be progressively incorporated along the different language levels, associating them with simpler lexical units in the beginner levels compared to those in the intermediate and advanced ones. In addition, it is also important to retrieve them in the subsequent levels. This will allow an expansion of the vocabulary around conceptual and functional groupings. Therefore, in general Spanish courses, emblems must be included within thematic units that show their functionality and use in communication, thus promoting meaningful learning.
- It is very important to promote connections with the mother tongue and to present the intercultural and intracultural varieties, where students learn emblematic differences within the pan-Hispanic world.
- Taking as a starting point the stages established by Cestero for the teaching of NVC (2004, 2017a), we have elaborated our own proposal in relation to the didactic progression:
 - i. The presentation can be done through real materials or through materials created by the teacher that are adjusted to students' language level and specific needs. Preferably videos will be used, although images of the central part of emblems may also be useful if accompanied by the

teacher's representation. Likewise, the presentation can start from the associated linguistic exponent and, from there, reach the emblem. Or, on the contrary, start from the emblem to then work with the different associated lexical units. The latter better promotes the interpretative analysis and the autonomous learning of students. In addition, emblems can be presented in isolation (where *parakinetic qualities* will be better observed) or in context (where discursive, pragmatic and sociolinguistic information can be obtained). A combination of all of the above would be the most adequate in obtaining a complete and detailed vision of the four dimensions of the emblem (form, meaning, use and linguistic exponents).

- ii. The activities of the second phase (closed and directed practice) and of the third phase (semi-closed and directed reinforcement) have been divided into identification and production skills. In them we have offered a list of examples of activities that can be carried out, where we have also taken into account whether emblems appear in isolation or in context. In these phases, the emblematic component will be reflexively compared with the mother tongue and practiced, and pertinent intercultural and intracultural differences will be established.
- iii. In the phase of semi-directed and open activities to achieve acquisition, in addition to role-plays, we propose tasks connected with the reality of the language. At this stage special attention will be paid to the sociolinguistic adaptation and the pragmatic value of the emblematic gestures.
- From a functional classification of strategic competence, we have offered a series of cognitive, metacognitive, social and affective strategies that contribute to the learning of emblems. With these strategies, students activate a series of mental operations in order to overcome the different stages of learning, solve problems and achieve the new objectives proposed.

In addition to the previous stages, we consider that every sequence must end with evaluation activities. We summarize below the considerations in this regard:

- To obtain a complete view of the learning, different types of evaluation should be applied: first, the level of execution and the elements considered must be taken into account (holistic/global vs. analytical assessment); second, the skills and abilities involved; third, the moment of evaluation (formative /continuous vs. summative/at a specific moment); and, fourth, the agent or person responsible for the assessment (teacher/examiner/researcher vs. students-to themselves or their classmates).
- For a complete summative evaluation, tests should be created integrating different activities that measure the four dimensions of emblems (form, meaning, use and linguistic exponents) through different skills (behavioral, cognitive and affective), knowledge (procedural and declarative) and skills (oral presentation, interaction and comprehension: audiovisual or visual), as well as through different types of practice (free, semi-controlled or controlled). In relation to the above, it is important to design sequences where different tests are properly ordered to avoid the emblematic priming effect.
- Knowing the evaluation criteria in advance will promote students' confidence. In addition, if they have the opportunity to analyze the criteria for tests where emblems are evaluated along with other elements of the language, they will be aware that their emblematic competence will also be assessed, which will highlight the importance of and interest in its learning.
- The objective of each test will determine its linguistic content: if it is only intended to measure the emblems' meaning-form binomial, simple lexical units should be used; if it is intended to evaluate both the emblematic and the lexical competence, more complex units should be incorporated; if the goal is to assess the two previous options, a sequence should be established, starting from simpler units and leading finally to the most complex ones.

- Production tests must be recorded on video, visualized and subsequently evaluated for three reasons: to ensure the most objective evaluation possible where kinesthetic performances can be carefully analyzed, to calm the anxiety of students and to have the linguistic sample in reviews where students want to consult their results.
- In addition to the teacher's evaluation, for students to play an active role and reflect on their degree of control and progress, it will be convenient to incorporate self-assessment and evaluation of other classmates as part of the continuous and formative evaluation. Both should pay attention to specific aspects, be guided by the teacher and focus on errors and achievements. The teacher's guidance can be progressively reduced, always bearing in mind that there will be students who will progress in their meta-linguistic and strategic competence in a different way, so a differentiated approach must be applied. Students will be able to incorporate both types of assessment within their learning portfolio.

The pedagogical section ends with the proposal of two rubrics that can be used as a model for emblematic competence assessment in SFL. In the first (EAE), we have outlined the characteristics of each learning stage in emblems' production and identification. This rubric will allow teachers and researchers to deepen the learning process of these gestures. In the second (PHAE), we have presented a series of criteria to holistically evaluate the emblems' production, along with the rest of the elements that intervene in the communication, and analytically, where the different dimensions of the emblem are analyzed. Both rubrics should be adapted according to the objectives of each evaluation, and to future studies carried out to better understand the learning of these gestures.

This summarizes the main contributions of this doctoral thesis, as well as the future lines of research arising from the results found. We are aware of the limitations of this work, but we hope that it will contribute to the theoretical and empirical studies on nonverbal communication and its teaching practices in foreign language classes. We conclude by advocating the development and impulse of this study path in order to underlie a complete teaching of Spanish where non-verbal signs receive the attention they deserve according to their importance in communication.