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AN ANALYSIS OF METAPHOR IN THE LANGUAGE OF HISTORY OF ART IN CLIL SECONDARY EDUCATION

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Abstract

The Conceptual Metaphor Theory is one of the most influential notions derived from Cognitive Linguistics, postulating that a large part of what we say has a metaphorical base. This theory argues that language reflects associations in our representation of knowledge that influence our way of thinking and understanding the world. Thus, metaphor structures our cognitive processes and reveals that meaning is the pillar on which any communicative act is buttressed. In a similar vein, linguistic evidence shows that a great deal of language has an embodied nature since it is intrinsically linked to human behaviour, hence the notion that our ideas are shaped by the structure of our bodies and our experiences. Since metaphor is recognized as an important element in both language and thought, it seems relevant to pay attention to the teaching of strategies for raising awareness and comprehending metaphors both in the L1 and L2. To this end, an analysis of the language of the History of Art subject in two mainstream Spanish textbooks and two Content and Language Integrated Learning (CLIL) textbooks has been carried out in order to identify the embodied metaphors that are used to designate certain elements of architecture. In light of the results, the metaphors found in both Spanish and English have been compared and a proposal of activities focused on the development of metaphorical competence for CLIL learners has been designed.

Keywords: Cognitive Linguistics, metaphor, embodiment, History of Art, CLIL.

Resumen

La Teoría de la Metáfora Conceptual constituye uno de los postulados teóricos más influentes de la Lingüística Cognitiva, la cual sostiene que gran parte de lo que decimos tiene una base metafórica. Esta teoría defiende que el lenguaje refleja asociaciones en nuestra representación del conocimiento que influyen en nuestra forma de pensar y entender el mundo. Así, la metáfora estructura nuestros procesos cognitivos y pone de manifiesto que el significado es el pilar sobre el cual se apoya cualquier acto comunicativo. Del mismo modo, la evidencia lingüística muestra que gran parte del lenguaje tiene una naturaleza corporeizada, ya que este está intrínsecamente vinculado al comportamiento humano, de ahí la concepción de que nuestras ideas estén conformadas por la estructura de nuestros cuerpos y nuestras experiencias. Dado que la metáfora es reconocida como un elemento importante tanto en el lenguaje como en el pensamiento, parece relevante prestar atención a la enseñanza de estrategias para crear conciencia y comprender las metáforas tanto en la L1 como en la L2. Con este fin, se ha llevado a cabo un análisis del lenguaje de la asignatura de Historia del Arte en dos libros de texto convencionales en español y dos libros de texto de Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE) para identificar las metáforas corporeizadas que se utilizan para designar ciertos elementos de la arquitectura. A la luz de los resultados, se han comparado las metáforas encontradas tanto en español como en inglés y se ha diseñado una propuesta de actividades enfocadas al desarrollo de la competencia metafórica para los alumnos de AICLE.

Palabras clave: Lingüística Cognitiva, metáfora, corporeización, Historia del arte, AICLE.

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1. INTRODUCTION

1.1. Aims

If you think about 'metaphors' the first thing that probably comes to your mind would be those comparisons people use at certain occasions to express the meaning of something. If you are a Biology teacher you surely use the term 'Animal Kingdom' to designate all animal species in the world; if you are a doctor you will refer to the heart as 'the body's engine'; or if you are a lover of poetry you will be familiar with the expression 'your teeth are like pearls'. This is what metaphors consist of, talking about one thing as if it were another.

According to the Oxford Dictionary, a metaphor is 'a figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable'. This is the definition we usually consider when we talk about metaphors, since we tend to relate them with poetry or formulaic language. And this is why most people think they can do without them, because metaphors are usually conceived as isolated constructions, separated from ordinary language. However, as the second entry for such term points out, a metaphor may simply be 'a thing regarded as representative or symbolic of something else'. In this sense, metaphors are not only related to literary language, but they go beyond, they are around us and we resort to them more often than we imagine. Following George Lakoff and Mark Johnson's line of thought, a great deal of language is motivated by metaphor, and taking this view into account, it is essential to establish as a point of departure that would consider that 'metaphor is pervasive in everyday life, not just in language but in thought and action' (Lakoff & Johnson, 1980, p. 3).

The present MA dissertation aims to provide an account of the role of metaphors in the language employed in the subject of History, specifically, in some topics devoted to History of Art —which is part of the syllabus for the subject of History in our educational system— both in Spanish and CLIL textbooks. It first outlines the language theory that supports this piece of work, Cognitive Linguistics, reviewing its beginnings and theoretical principles, and focusing particularly on the notion of *embodiment*. Then, some evidence of the importance of metaphors in education is presented, as well as a description of CLIL both as an educational and as a language teaching approach. Later, a qualitative study that explores the role of metaphor in some Spanish and CLIL Secondary History textbooks is carried out, and some materials and activities are proposed on the basis of the results obtained from the study in order to develop

students' awareness of the presence of metaphors in the CLIL History subject. The main objective of this proposal is to introduce metaphor in the classroom as a tool for learning some of the contents of a non-linguistic subject through English as a foreign language. Finally, some pedagogical implications and reflections are drawn.

2. THEORETICAL FRAMEWORK

2.1. The beginnings: Wittgenstein's Language Games

In order to find the first traces of the 'blossoming of metaphors' —being this a metaphor itself that serves us to express the proliferation of its uses— it is essential to pay attention to Ancient Philosophy, particularly to the need philosophers had to explain the relations between language and the world. In fact, if we go deeper into the world of the philosophy of language we will realize that many philosophical analyses have their theoretical foundation in the distinction between literal and figurative meaning (de França Gurgel, 2016, pp. 157–158). But as Lakoff and Johnson advocate in the Preface of their most influential publication, in traditional philosophy and linguistics 'meaning' often has nothing to do with 'what people find meaningful in their lives' (Lakoff & Johnson, 1980, p. ix).

For centuries we have coped with some language theories that had grammar as their main focus. One of the most widespread hypotheses was Chomsky's idea that the essence of language lies in the human capacity to combine a series of finite elements (words) so that all possible messages can be expressed (Soriano, 2012, p. 14). In this sense, the main objective of linguists was syntax and grammar rules, as they thought they were the base and what shaped language. And although it is not totally wrong, sometimes it is necessary to consider questioning what we take for granted, since the fact that a particular mindset lives with us for a long time does not mean that it is a universal truth.

In the same way, the traditional view of the metaphor conceived it as a mere comparison, whose semantic extension was reduced to a simple ornament. However, later on, authors began to resort to the idea that metaphors had a semantic and a pragmatic component and that both the fields of semantics and pragmatics represented different issues. At this point, Lakoff recognized the Austrian philosopher Ludwig Wittgenstein as the one who noticed 'the first crack in the classical theory'. In fact, Wittgenstein dismantled this idea claiming that a category like 'game' (board games, chess...) does not fulfil the classic premises, since not all games have in common or

share the same properties. Thus, 'the category of games is united by what Wittgenstein calls *family resemblances*' (Lakoff, 1987, p. 16).

Therefore, the concept of language elaborated by Wittgenstein after 1930 proposes a turn to the premise of separating semantics from pragmatics, since he does not devise barriers between two meanings, but for him both are, on the contrary, interdependent of themselves and dependent on the context at the same time (de França Gurgel, 2016, p. 167). Thus, Wittgenstein breaks with the traditional idea of metaphor as a rhetorical figure, shedding light on a new way of approaching the role of metaphors.

One of Wittgenstein's main concerns was the nature of aesthetics. But what is aesthetics? What did Wittgenstein mean by the term 'aesthetics'? As Carmona explains, Wittgenstein's aesthetics is closely connected to the use of language in discussions about art, but he also understood aesthetics as a bridge of comprehension between the world and ethics. Thus, Wittgenstein argued that the meaning of words was set by the context and, therefore, words did not have an exclusive meaning; in the same way as he postulated that those things expressed by a work of art could not be separated from its context, which was the work of art itself. For that reason, Wittgenstein used to compare aesthetics with art, and especially architecture or music, concluding that those artworks that manage to communicate feelings or emotions are those that meet the rules of the 'language game' developed by the artist (Carmona, 2011, pp. 2–7).

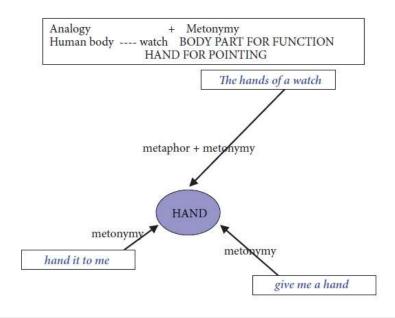
With this in mind, it is worth mentioning that Wittgenstein established a trichotomy between art, aesthetics, and philosophy: aesthetics was the one that described and explained art, and philosophy analysed and criticized the language used to discuss artistic and aesthetic issues (Reguera, 1992, p. 11). Therefore, the concept of 'language game' was used by Wittgenstein to designate forms of language that were simpler than the totality of language as a whole and, therefore, could be used as examples of how the complex web of language worked (Monk, 1991, p. 337).

Wittgenstein intended to show that the connection between a word and its meaning understood as a single, closed correspondence was totally wrong. On the contrary, he argued that the meaning of a word depended on how that word was used in a specific context (Carmona, 2015, pp. 82–83). To this aim, he used to compare language with a toolbox, since like all tools, words also have certain things in common and they sometimes resemble each other, but each of them has a different role. According to Wittgenstein, words were also similar to tools because they acquired

meaning when they were used and, given that they have different uses, they may also acquire different meanings. Thus, the goal of Wittgenstein's *Investigations* was to eradicate the search for the essence of language and show that language can instead be used in multiple ways and, therefore, there are multiple 'language games' (Carmona, 2015, pp. 84–87).

This notion of 'language game' developed by Wittgenstein is reflected later in Lakoff's idea of semantic networks. In order to set the context for this notion, it is essential to start from the basis that we tend to organize knowledge in a very particular way, i.e., 'by means of structures called *idealized cognitive models*, or ICMs' in which each of its elements would correspond to a conceptual category (Lakoff, 1987, p. 68). In other words, these models or schemas act as a network of nodes and links, being every node in a schema related to a conceptual category. In this sense, the features of the category would be shaped by a series of factors such as 'the role of that node in the given schema, its relationship to other nodes in the schema, the relationship of that schema to other schemas, and the overall interaction of that schema with other aspects of the conceptual system' (Lakoff, 1987, pp. 69–70).

To illustrate this idea we shall be using the example provided by Piquer Píriz (2011) in which a semantic network of some meanings of the term 'hand' is presented:



Metonymy
BODY PART FOR FUNCTION (Barcelona, 2000; p. 11) / THE HAND STANDS FOR THE
ACTIVITY (Kövecses, 2002; pp.207-210)
(HAND FOR PASSING THINGS /// HAND FOR HELPING)

Figure 1. Lexical network of some senses of 'hand'. Reprinted from Piquer Píriz, A. M. (2011). «Motivated word meanings and vocabulary learning: The polysemy of hand in the English for young learners classroom». Metaphor and the Social World, 1(2), 154–173.

In this way, the central or prototypical meaning of the word 'hand' (the part of the body located at the end of the arm and composed of five fingers) is represented in the central circle and related by arrows with some of its figurative meanings. These meanings (1) give me a hand¹ (in Spanish échame una mano¹), (2) hand it to me (this construction does not exist in Spanish and it would be equivalent to 'entrégamelo/dámelo (con la mano)' and (3) the hands of a watch (in Spanish 'las manecillas' o 'las agujas' de un reloj) are related to the primary sense by means of metonymic connections as 'the part of the body by its function' (examples 1 and 2) or metaphorical/analogical with metonymic component (example 3). Therefore, the parallelism between a clock and the human body is that the hands of a watch are equivalent to the hands of a person and perform one of the functions of this part of the body, which is to point with the fingers (Piquer Píriz, 2016, p. 160).

Although at first it may seem easy to understand, this new conception of human language involved an authentic revolution in linguistics, since until then, meaning was not conceived as the result of our interaction with the world and as a fundamental part of our cognition.

2.2. The Cognitive Revolution

In the mid-70s, a group of language scholars began to consider that not taking into account the phenomenon of meaning when explaining language involved leaving aside very important aspects in relation to what it implies. Since language is fundamentally a means of communication, they thought meaning plays a fundamental role in its explanation. Hence, some pioneers such as George Lakoff, Charles Fillmore, Leonard Talmy or Ronald Langacker initiated research lines that proposed a new approach to the study of language and that represented the germ of what we know today as Cognitive Linguistics (Soriano, 2012, p. 15).

Thus, although it is difficult to specify the exact date of the birth of this linguistic theory, the publication of the aforementioned book by Lakoff and Johnson of 1980, called *Metaphors We Live By* is taken as a point of departure. However, it is the year 1987 that is usually taken as a reference, since two of the classic works of this movement were published, *Foundations of Cognitive Grammar* by Langacker, and *Women, Fire and Dangerous Things* by Lakoff (Soriano, 2012, pp. 15–16).

¹ Italics will be used to refer to concrete linguistic expressions, following the conventions of Cognitive Linguistics.

Consequently, Cognitive Linguistics (henceforth, CL) is now a fully established linguistic model that has generated great interest as is shown by the large number of publications that have been made in relation to this discipline in the last four decades. In fact, as Alejo-González and Piquer-Píriz note, 'a clear sign of the maturity of a theoretical approach is its ability to be applied to a varied number of contexts and this has, certainly, been the case of CL in recent years' (2018, p. 1).

2.2.1. Theoretical Principles

The idea that figurative language, and metaphor in particular, often structures our cognitive processes, is probably the central tenet of CL. Therefore, as its main premise, CL maintains that 'language is an integrated capacity in general cognition' (Soriano, 2012, p. 16). Together with this, CL argues that there is no point in analysing language as an autonomous unit, but it is necessary to look for connections between the linguistic faculty and other cognitive faculties.

As Ibarretxe-Antuñano and Valenzuela (2012) posit, there is great evidence that language is based on previous cognitive faculties (many of which are shared with other animals), and on gradual adaptations of the body structure, such as the adaptation of the vocal and auditory apparatus, or an increase in the control of the muscles that are involved in the production of sounds. Accordingly, language cannot be conceived as a faculty distinct from the rest because, in that case, we should assume a sudden mutation that would have created a new linguistic organ, that is, an abrupt evolutionary leap (Ibarretxe-Antuñano & Valenzuela, 2012, p. 17).

For this reason, it is essential to explore the relationships between language and other cognitive faculties such as perception, memory or categorization to understand how language really works. In this way, one of the most widely exploited relationships in CL is that between *sensation* and *perception*. It is understood that to go from *sensation* (the information that reaches our senses) to *perception* (the information that is filtered by our attention and that informs us of what is happening around us) we use a strategy that consists of the division of the information into 'figure' (relevant information) and 'background' (less relevant information). Through this process we use our attention to select the information that seems most relevant in an automatic and unconscious way (2012, p. 17).

Another fundamental aspect of CL, which is directly related to such figurebackground segregation, is the organization of the conceptual structure. This model argues that every concept needs to be contextualized in a coherent structure of knowledge (conceptual domain) based on our experience. As a result, these knowledge structures are assembled in memory and will always be filtered through a cultural base (2012, p. 18). Imagine that we take the photo of a cathedral as an example. If we look at the cathedral itself, this would be the figure (the building) that is outlined on the background. However, if we were looking at this same photo in a brochure, the cathedral would also have another meaning, that of being a representative monument of a particular city, for example. On the other hand, if this photo were found in a History textbook, its interpretation would possibly be that of being part of an architectural movement belonging to a certain period of time. Therefore, the interpretation that we give to the cathedral will depend on the conceptual domain in which we locate it.

Another key issue in CL is *categorization*, which can also be considered as a mechanism shared by the linguistic faculty and other cognitive faculties. In words of Lakoff and Johnson (1980):

A categorization is a natural way of identifying a *kind* of object or experience by highlighting certain properties, downplaying others, and hiding still others. Each of the dimensions gives the properties that are highlighted. To highlight certain properties is necessarily to downplay or hide others, which is what happens whenever we categorize something, Focusing on one set of properties shifts our attention away from others. When we give everyday descriptions, for example, we are using categorizations to focus on certain properties that fit our purposes (p. 163).

In this sense, categorizing is our way of understanding the world and making sense of our experiences. However, we do not divide the elements of the world in a clear way, that is, those that belong to a category and those that do not belong to that category, but rather the categories are gradual entities. In this way, there are elements that occupy a central position (*prototypical* elements) and that share more information with each other than other elements (*marginal* elements) that although are also part of this category occupy less central positions (Soriano, 2012, p. 19). Thus, the prototypical elements are recognized more easily, as for example we quickly recognize that *football* belongs to the SPORT category, but it takes us more time to categorize a more marginal element of this category, such as *archery*. Therefore, as stated by Ibarretxe-Antuñano and Valenzuela (2012), we can conclude that 'human language is very sensitive to the issues of categorization' (p. 19).

But without a doubt, one of the main characteristics of CL is its emphasis on the importance of meaning in the explanation of linguistic phenomena. Thus, CL gives meaning the main role when it comes to understanding language, since its theoretical foundation is built on the basis that the main function of language is communication. In other words, CL assumes that having a base of meaning allows us to explain in a natural and reasonable way a large number of linguistic phenomena, such as polysemy, homonymy or even the application of a certain grammatical construction (Ibarretxe-Antuñano & Valenzuela, 2012, pp. 19–20).

2.2.2. The Concept of *Embodiment*

Apart from the above-mentioned defining features of CL, the concept of *embodiment* deserves a special mention for being a fundamental aspect of this piece of work. According to Johnson (1987), 'our reality is shaped by the patterns of our bodily movement, the contours of our spatial and temporal orientation, and the forms of our interaction with objects' (p. xix). In this sense, as we are 'rational animals', our rationality is embodied, and this aspect influences how we perceive and understand the world and how we reflect and react to our own experiences.

To this extent, and as Flumini and Santiago (2016) point out, the idea that embodiment is based on the fact that the meaning of mental representations is found in the receptive and motor experiences of the human body that are generated when we interact with the referents of those concepts (p. 216). To facilitate the understanding of this concept it is enough to reconsider the example by Piquer-Píriz on the semantic extensions of the word *hand*, which clearly presents an embodied nature. If we look at it, we can observe that we use the word *hand* in the expression '*hand* it to me' because we perform the action of passing things around using that part of the body, or we say 'give somebody a *hand*' to refer to the action of helping someone to do something because, in fact, when we help we usually use our hands (Piquer Píriz, 2011, p. 159). Therefore, the categories we build depend to a large extent on the details of our sensorymotor apparatus, meaning that our bodily configuration determines the categories that we can establish (Ibarretxe-Antuñano & Valenzuela, 2012, p. 20).

Hence, the idea of embodiment seems to be clear when we refer to concrete concepts with which we often interact in our daily lives. However, the representation of abstract concepts was at first a trouble for embodied cognitive science. As a result, today cognitive science defends that abstract concepts rely on more concrete concepts in

order to acquire meaning. Then, just as concrete concepts are based on bodily interactions with the environment, abstract concepts would be based on those more concrete concepts (Flumini & Santiago, 2016, p. 217). To illustrate this aspect we will refer to the example provided by Lakoff and Johnson (1980) on how we conceptualize the abstract domain *time*. In contemporary English we use the metaphorical concept TIME IS MONEY² because in our culture we conceive time as a limited resource or a valuable commodity. In this sense, we understand time as something that can be wasted, spent or saved, and it becomes a metaphorical concept since 'we are using our everyday experiences with money, limited resources, and valuable commodities to conceptualize time' (pp. 7-9). But this is just an example of the presence of metaphors in our colloquial language. From now on we will analyse the fundamental role of these constructions in our way of communicating and how meaning comes to the fore through metaphors.

2.3. The Rise of Metaphor: Conceptual Metaphor vs. Metaphorical Expression

Metaphor has traditionally been considered as a mere linguistic ornament, since it is usually labelled as a rhetorical figure, like simile, personification or hyperbole. Therefore, our mind tends to pigeonhole metaphors within the poetic world, giving them an aesthetic function characteristic of literary language. But the truth is that this figurative language transcends the borders of aesthetics in such a way that it has been shown that metaphors not only adorn and please our ears, but also structure our cognitive processes (Hijazo-Gascón, 2011, p. 142).

Thus, CL defines metaphor as 'understanding one conceptual domain in terms of another conceptual domain'. In this sense, conceptual domain A is conceptual domain B, what is designated as *conceptual metaphor* (Kövecses, 2010, p. 4). This concept of conceptual metaphor, while it may appear redundant, was first established by Lakoff and Johnson (1980) in their theory named after it. The main idea of the Theory of Conceptual Metaphors is, as stated above, these abstract conceptual domains acquire their meaning from more specific domains, which are understood more clearly because we have experiences with them. Lakoff and Johnson identified a large number of conceptual metaphors by analysing linguistic expressions. This discovery led them to

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² Small caps will be used to refer to conceptual metaphors, following the conventions of Cognitive Linguistics.

state that conceptual metaphors can be understood as a mechanism of the human mind focused on the expansion of knowledge towards new conceptual horizons (Flumini & Santiago, 2016, pp. 218–219).

One of the most widespread examples is LOVE IS A JOURNEY³. The concept LOVE, as is the case with most emotional concepts, is not clearly traced in our experience, and therefore it must be understood indirectly through the metaphor (Lakoff & Johnson, 1980, p. 85). Thus, by means of this conceptual metaphor we portray love as if it were a type of trip, which is a more concrete and content-filled concept since we associate it with our experiences traveling from one place to another (Flumini & Santiago, 2016, p. 219). By doing this, LOVE is understood as something with a beginning and an end and, therefore, a direction. In fact, we can find this conceptual metaphor in linguistic expressions like 'look how far we've come', 'we'll just have to go our separate ways', 'we're at a crossroads', 'I don't think this relationship is going anywhere', 'it's been a long, bumpy road', or 'this relationship is a dead-end street', among others (Lakoff & Johnson, 1980, pp. 44–45).

Taking into account all this, Lakoff and Johnson realized that these expressions were not simply 'set phrases' (in Spanish *frases hechas*), but rather they are expressions with a common conceptual nucleus that allow the formulation of new expressions rooted in that nucleus. These linguistic expressions are thus manifestations of conceptual metaphors that were called *metaphorical expressions* (Flumini & Santiago, 2016, p. 219). According to Hijazo-Gascón (2011), it is very important to differentiate between the conceptual metaphor and the metaphorical expression. The conceptual metaphor, although it is abstract, often coincides between languages (since it is based on experience); however, metaphorical expressions are the statements through which these metaphors are expressed, and vary from one language to another (p. 143).

Therefore, taking into account all these aspects, conceptual metaphors should not be considered as ornamental elements of language, but as a cognitive tool that allows us to express abstract and often complex concepts.

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³ The general form of a conceptual metaphor is THE ABSTRACT CONCEPT IS THE CONCEPT. The domain that has to be filled with content is called *target domain* and the domain that already has content through our experiences is called *source domain* (Kövecses, 2010, p. 17).

2.4. Metaphors in the Classroom

The Conceptual Metaphor Theory (CMT) is one of the most influential notions derived from CL, since conceptual metaphor is an attractive phenomenon with many applications in different contexts and disciplines (Soriano, 2012, p. 118). Therefore, although its applications to the instruction and acquisition of second and foreign language seem to be the most numerous, the truth is that a great number of applied CL-oriented studies have been carried out in disciplines such as literature, philosophy, psychology, discourse studies, translation or artificial intelligence among others (Piquer-Píriz & Alejo-González, 2018, p. 3). But focusing on the case at hand, very few applications have been made in relation to CLIL practices and, consequently, to the creation of CLIL teaching materials that exploit the multiple benefits of the use of metaphors in the classroom.

According to Ortony (1993), 'metaphors in education have traditionally been viewed as occasionally heuristically useful but essentially ornamental, and sometimes downright pernicious'. However, he argues that 'metaphors are essential for learning in a number of ways [as] they may provide the most memorable ways of learning and thus be our most efficient and effective tools' (p. 460). To this extent, he suggests that in order to take full advantage of what he calls *educational metaphors*, these must be considered from two points of view, that of the student and that of the teacher.

Thus, Ortony distinguishes between *comparative* and *interactive* metaphors. This view defends that comparative metaphors transfer meaning through comparisons, implying that two apparently different things actually have similarities. In this way, comparative metaphors are built on the knowledge that already exists or, as has been previously stated, on our experiences; but they do not provide a new way of understanding. On the other hand, interactive metaphors create similarities that can serve students as links between prior knowledge and new knowledge. In this sense, this type of metaphor supposes a change in the cognitive structures of the students, which results in the learning of new information. That is why it is vitally important that the teacher is aware of this process when dealing with the transmission of knowledge through metaphors, since what for a teacher can be considered a comparative metaphor (due to their experiences) for the student will probably turn out to be an interactive metaphor (because he may not have such past experiences) (Ortony, 1993, pp. 442–443).

Thus, Boers and Lindstromberg (2008) claimed that CL applications to teaching will help students gain a deeper understanding of the target language, as well as to memorize a greater number of words and phrases, to be aware of the bonds that link language with culture, and to realize that there are other alternatives to learn other languages that are far from traditional and that, in turn, can become more effective (p. 27). Related to this is Low (1988)'s advocacy for the need to develop *metaphoric competence* in students, i.e., 'awareness of metaphor, and strategies for comprehending and creating metaphors' (Deignan, Gabryś, & Solska, 1997, p. 353).

The prelude to this competence can be found in the concept of *communicative* competence coined by Hymes in 1972, which involved a revolution in the way of approaching the language teaching-learning process. Thus, this new vision defended that communication was the central axis of this process, leaving aside grammatical competence, which until then had been the main focus. Different sub-competences were necessary to develop communicative competence. One of the most widespread classifications is that of Canale and Swain (1980), who differentiated between linguistic, sociolinguistic, discursive and strategic competences. Thus, we can find in this last one a bonding bridge to the metaphorical competence, since the strategic competence consists of communicative verbal and nonverbal strategies that are used to compensate the problems in communication. In this sense, both have been developed with the aim of trying to promote the autonomy of the student to solve problems in communication and understanding of language. Hence, the later concept of metaphorical intelligence proposed by Littlemore (2001), understood as the ability to produce, interpret and activate metaphors, can be interesting when explaining metaphors as communicative strategies in the classroom (Hijazo-Gascón, 2011, pp. 144–145).

2.5. Content and Language Integrated Learning (CLIL): A bridge to cognitive flexibility

Content and Language Integrated Learning (CLIL) has widely expanded in Europe and elsewhere, becoming a widespread phenomenon first as an educational approach and second as a language teaching approach. Due to its characteristics, mainly, its flexibility, it can be seen as a suitable method for the integration of a CL-oriented teaching approach. CLIL's duality allows students to acquire new contents through a language different from their mother tongue, which leads them to develop a greater cognitive flexibility. To this extent, having metaphor awareness may be very

beneficious at the time of integrating content understanding and language proficiency, since it can provide students with the clue to the assimilation of new concepts and the learning of another language in a parallel and effective way. But before dealing with the benefits of CLIL in the acquisition of content through language, we shall offer a description of what the CLIL approach means.

In approaching the term CLIL, one the most compendious definitions was provided by Coyle et al. (2010), who state that 'CLIL is a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language' (p. 1). Thus, as Coyle et al. point out in such definition, CLIL may be understood as an educational approach. This fact is mainly due to the challenges that some factors such as the globalization, the development of technology or the so-called Knowledge Age had brought to modern ages. These changes suppose that educational systems also need to adapt to the demands of a new and changing society in which people is developing a mind-set on the basis of integration and immediacy (2010, pp. 9–10).

All this has resulted in reactive and proactive responses, among which CLIL emerged as a solution for 'overcoming linguistic shortcomings' and for 'promoting equal access to education for all school-aged students, including those with additional support needs' (Coyle et al., 2010, pp. 6–7). In this process of overcoming linguistic shortcomings, metaphors can be regarded as a tool for greater understanding of new contents on the basis of language, given that, as previously stated, metaphorical competence advocates for promoting learner's autonomy to understand language and solve communication problems. Besides, Coyle et al. (2010) suggest that CLIL also assists the stimulation of cognitive flexibility, which contributes to the enrichment of the acquisition of the contents and helps the learner to develop a more intricate learning level (pp. 10-11).

On the other hand, Mehisto et al. (2008) refer to CLIL as an 'umbrella term' embracing other educational approaches, and claim that it embeds and offers a flexible way of applying the knowledge coming from all of them (p. 12). However, as Alejo and Piquer (2010) indicate, such a broad concept makes it difficult to distinguish the limits of CLIL (in Cenoz et al., 2014, p. 246). But despite this 'lack of conceptual clarity' noted by Cenoz et al. (2014, p. 257), Mehisto et al. (2008) already seemed to have the answer for this controversial issue, since they identify the third driver element, apart from the integration of content and language, that allows the CLIL practice to be

complete and successful, which is the development of learning skills (p. 11). Therefore, the boundaries of CLIL may be found into this basic triad, designating CLIL as any educational practice that includes these three crucial components. To this extent, metaphorical competence could be understood as one of those skills whose development is allowed and facilitated by the CLIL approach, since as Castellano-Risco and Piquer-Píriz (in press) posit, such competence is linked to 'the ability to use our knowledge of concrete things to understand abstract concepts' (p. 4), an ability that can perfectly emanate from the cognitive flexibility that CLIL pedagogy provides to students.

Then, moving from the general to the particular, CLIL may be also considered a language teaching approach since it arose from the need to improve foreign language teaching methodologies. Although there is still some controversy about this issue, according to Marsh (2009), the capacity to think in more than one language may result in a positive effect on content learning (in Coyle et al., 2010, p. 10). CLIL can, thus, offer an opportunity for teachers to introduce metaphor in the classroom, providing in turn the opportunity for students to develop more open and critical thinking.

All these positive characteristics are accentuated with the motivating power of CLIL, since it has been demonstrated that students involved in CLIL programmes have a greater degree of motivation towards the different subjects, a fact that implies a great advantage for CLIL teachers. For this reason, it can be said that education has found in CLIL the perfect ally to face the changes demanded by a society oriented towards this new educational landscape.

Coyle et al. (2010) also posit another key point in relation to educational materials in CLIL. They argue that the use of authentic materials is essential in CLIL lessons in order to achieve successful learning (p. 11), something that supposes a challenge for both language teachers and CLIL teachers given that the use of authentic texts in the classroom sometimes implies a workload for them, since they are in need of preparing and sometimes adapting such materials beforehand.

This is one of the aims of this piece of work, the design and production of CLIL teaching materials that allow students to acquire the contents of a non-linguistic subject (History of Art) through an additional language on the basis of the Cognitive Linguistics theory and the introduction of metaphors in the teaching-learning process.

2.6. The CLIL History Subject

As is well known, one of the core features of the CLIL approach is the fact that it implies the use of an additional language as the medium of instruction, understanding 'language as the means of study rather than the object of study' (Lorenzo & Moore, 2010, p. 24). In this sense, most research studies aimed at creating specific curricula for the development of language in non-linguistic subjects have focused on the written or spoken production that is specific to each of these subjects, (Science, History, Geography, etc.) and that, therefore, characterizes each of them. In fact, this interest in the analysis of the literacies of the different subjects has mainly been adopted from the perspective of Systemic Functional Linguistics, which proposes a genre-based approach as a method of integration of content and language in CLIL. According to Martin and Rose (2003), a genre is 'a staged, goal-oriented social process. Social because we participate in genres with other people: goal oriented because we use genres to get things done; staged because it usually takes us a few steps to reach our goals' (in Llinares, Morton, & Whittaker, 2012, p. 110).

Following this line of thought, the 'Sydney School' of systemic functional linguistics developed a genre-based pedagogy in which they outlined the eight different genres (recount, narrative, procedure, information report, explanation, argument, discussion, and review) that are thought to be present in L1 primary education subjects in the Australian curriculum. Thus, through this pedagogy students are guided towards awareness of genres on the basis of a series of aspects such as their purposes, variations, structural features, linguistics features, and examples. In this sense, as Morton (2010) posits, 'throughout the process of building field knowledge, and deconstructing and constructing relevant genres, teachers and students will be involved in interactions in which they explore not only the meanings relevant to the specific content being studied, but also the forms in which this content can best be communicated' (p. 85).

Besides, many linguists have devoted their studies to analyse and describe the genres and registers present in subjects such as History from the point of view of the Systemic Functional Linguistics and have also worked with teachers in order to make them aware of the key role of language in the acquisition of the content subject. However, although this way of approaching the language of content-subjects have proven to produce great benefits in the classroom, both for students and for teachers, few of these studies have been addressed from the point of view of Cognitive

Linguistics. This is what this piece of work intends to do, to approach the language of the History subject, particularly that of the History of Art, from a cognitive perspective.

3. ANALYSING METAPHORS IN THE LANGUAGE OF HISTORY OF ART

3.1. Methodology

The present study aims to provide an approach to the presence and relevance of metaphor in CLIL by researching and analysing some semantic extensions of different body parts, therefore, related to the notion of *embodiment* in four textbooks that have the subject of Art as its main theme.

The selected sample consists of two CLIL textbooks and two non-CLIL textbooks (see Table 1 below). All of them correspond to the 2nd year of Compulsory Secondary Education and belong to the History and Geography subject. They consists of 10 units each of which contains a section dealing with some aspects related to the History of Art, from which the parts especially devoted to architecture will be analysed.

 Table 1

 Selected books for the analysis

Book	Category	Level	Language
Geografía e Historia. (2016). Edelvives	Textbook	ESO 2	Spanish
Geografía e Historia. Inicia Dual. (2016). Oxford University Press	Textbook	ESO 2	Spanish
Social Sciences. Oxford CLIL. (2014). Oxford University Press	Textbook	ESO 2	English
G&H 2.1. Geography and History. (2016) Vicens Vives	Textbook	ESO 2	English

It should also be noted that before selecting this sample two textbooks of the History of Art subject and an encyclopedia in Spanish were also reviewed, but since their incorporation in the analysis would not provide a balanced sample, it was decided not to include them. The two textbooks are *Nuevo Arterama*. *Historia del Arte* (2nd year of Bachillerato) by Llacay Pintat et al. (2010); and *Historia del Arte* (COU) by Fernández at al. (1993), both published by Vicens Vives. The encyclopaedia is titled *Cómo construir una catredral*. *Construyendo la historia de una obra maestra medieval*, which was authored by Hislop (2015) and published by Akal. It is a translation into Spanish of the original book.

At the time of facing the analysis, a quantitative or qualitative method could have been chosen. The use of a quantitative method would have involved the collection of data for the compilation of a corpus to later use a metaphor identification procedure (e.g. MIP, which is one of the most widely used methods) that allowed to establish relationships between particular lexical units in the discourse and to recognize their metaphorical use in a given context. However, due to time constraints, I decided to carry out a qualitative analysis in which the search for metaphors is carried out manually, identifying them both in Spanish and in English in order to later compare and contrast them to establish similarities and differences between both languages.

In terms of the procedure followed to carry out the present analysis, the four textbooks were first skimmed in order to look for the most relevant sections (art: architecture), and secondly scanned to select metaphors built on the basis of resemblances with the human body. Let us take as a model another example by Piquer Píriz (2016) in which she interprets four different semantic extensions of the word 'head'. Such extensions are (1) the head of a bed (in Spanish 'el cabecero de la cama'), (2) the head of a hammer ('la cabeza de un martillo'), (3) the head of the stairs ('la parte alta de una escalera') and (4) the head of a line of cars ('la cabeza de una fila de coches'). The first three semantic extensions may be motivated by an analogy with the human body, reflecting an association between their 'highest part' or their 'upper part' and the head whereas the last one may be based on an animal body schema, reflecting a horizontal rather than a vertical position (pp. 165-168).

The concept of *embodiment* seems to be very present in the language of Art, more specifically in architecture, since throughout history there has been a tendency to establish relationships (through *image metaphors*) between architectural constructions and the human body, thus naming many of the different parts of civil buildings, churches or cathedrals through this type of metaphors. According to Caballero (2003), 'the image sources mapped onto architectural targets are of different sorts and can be grouped into (a) animate sources, and (b) inanimate sources. Among the former the most recurrent come from the biological domain, and concern human and animal body parts' (pp. 155-156). This domain constitutes the object of study of this analysis, which aims to identify those metaphors that equate buildings with human beings in relation to body parts.

Once embodied metaphors were identified in the selected textbooks, they were analysed in depth and compared between both languages. The dictionaries used to determine the literal and figurative meanings and the origin of the words were the *DRAE: Diccionario de la Real Academia Española* for the Spanish terms, and the *Oxford Dictionary* for the English terms, both in their online versions. The online etymology dictionary *Etymonline* was also consulted with the aim of clarifying the origin of some terms. The results obtained will be presented in the following section.

3.2. Results

The first question that arises when carrying out this analysis is the amount of metaphors contained in the selected sections of the textbooks. In this sense, 5 metaphors were identified in Spanish and 2 metaphors in English. They were then classified by providing their literal and figurative meanings and an example in context from each of the textbooks in which they appear.

3.2.1. Metaphors in Spanish

Table 2 presents a list of the metaphors identified in Spanish. Each metaphor is accompanied by two definitions, one in relation to its literal meaning, which refers to the part of the body in question, and another related to its figurative meaning, referring to the meaning it adopts in the language of architecture. An example in context of each semantic extension is also included, extracted from each of the analyzed textbooks.

Table 2 *Metaphors in Spanish: definitions and examples in the selected books*

Metaphor	Definition (<i>architecture</i>) (DRAE: Diccionario de la Real Academia Española)	Geografía e Historia. (2016). Edelvives	Geografía e Historia. Inicia Dual. (2016). Oxford University Press
Cabecera	Literal meaning: Cabeza: 1. f. Parte superior del cuerpo humano y superior o anterior de muchos animales, en la que están situados el cerebro y los principales órganos sensoriales. Figurative meaning: Cabecera: 19. f. Arq. En una iglesia o una catedral, parte donde se sitúa el altar mayor.	La planta del edificio es de cruz latina, pero, a diferencia de la románica, el brazo del crucero—el transepto—no sobresale y la cabecera se ensancha. (Granada Gallego & Núñez Heras, 2016, p. 110)	En el extremo de la iglesia está la cabecera, donde se sitúa el altar. [] Las cabeceras con forma semicircular se denominan ábsides. (Ayén Sánchez, 2016, p. 60)

Tímpano	Literal meaning: Tímpano: 1. m. Membrana extendida y tensa como la de un tambor, que limita exteriormente el oído medio de los vertebrados y que en los mamíferos y aves establece la separación entre esta parte del oído y el conducto auditivo externo. Figurative meaning: Tímpano: 5. m. Arq. Espacio triangular que queda entre las dos cornisas inclinadas de un frontón y la horizontal de su base.	Es frecuente también la visión del juicio final, de los cuatro evangelistas o sus símbolos y de los apóstoles. Se localizan, sobre todo, en la parte superior de la portada, llamada tímpano. (Granada Gallego & Núñez Heras, 2016, p. 109)	-
Nervio	Literal meaning: Nervio: 1. m. Conjunto de fibras nerviosas en forma de cordón blanquecino que conducen impulsos entre el sistema nervioso central y otras partes del cuerpo. Figurative meaning: Nervio: 9. m. Arq. Arco que, cruzándose con otro u otros, sirve para formar la bóveda de crucería. Es elemento característico del estilo gótico.	Esta bóveda, menos pesada que la de cañón, se forma por la intersección de dos bóvedas con arcos apuntados y se manifiesta en forma de nervios que se cruzan. (Granada Gallego & Núñez Heras, 2016, p. 110)	Se desarrolló la bóveda de crucería sobre nervios; estos trasladaban el peso de la bóveda a los pilares y a los contrafuertes. (Ayén Sánchez, 2016, p. 77)
Frontón	Literal meaning: Frente: 1. f. Parte superior de la cara, comprendida entre una y otra sien, y desde encima de los ojos hasta que empieza la vuelta del cráneo. Figurative meaning: Frontón: 6. m. Arq. Remate triangular o curvo de una fachada, un pórtico, una puerta o una ventana.	Los elementos decorativos fueron los clásicos, pero se interpretaron de forma más libre. De esta manera, los frontones se partían y se curvaban. (Granada Gallego & Núñez Heras, 2016, p. 229)	Los edificios pretendían generar sensación de movimiento. Por ello se abandonan las líneas rectas y se emplearon: [] Elementos quebrados, como frontones partidos. (Ayén Sánchez, 2016, p. 192)
Brazo	Literal meaning: Brazo: 1. m. Miembro del cuerpo que comprende desde el hombro a la extremidad de la mano. Figurative meaning ⁴ : Transepto: 1. m. Arq. Nave transversal que cruza la nave mayor y da a las iglesias y catedrales forma de cruz latina.	La planta del edificio es de cruz latina, pero, a diferencia de la románica, el brazo del crucero—el transepto—no sobresale y la cabecera se ensancha. (Granada Gallego & Núñez Heras, 2016, p. 110)	La planta suele tener forma de cruz latina, en la que un brazo, llamado transepto, es más corto que el otro. La zona donde se cruzan ambos brazos se llama crucero. (Ayén Sánchez, 2016, p. 60)

⁴ A definition related to architecture for the word *brazo* is not included in the DRAE. Such figurative meaning is collected in the entry for the word *transepto*.

3.2.2. Metaphors in English

Table 3 presents the two embodied metaphors that have been identified in English. Each of them is also accompanied by two definitions, one that shows its literal meaning, which refers to the part of the body in question; and another that reflects its figurative meaning, according to the meaning it adopts in the language of architecture. An example in context of each semantic extension is also included, extracted from each of the analyzed textbooks.

Table 3 *Metaphors in English: definitions and examples in the selected books*

Metaphor Definition (architecture) (OD: Oxford Dictionary)		Social Sciences. Oxford CLIL. (2014). Oxford University Press	G&H 2.1. Geography and History. (2016) Vicens Vives
Tympanum (pl. tympana)	Literal meaning: Tympanum: 1. Anatomy Zoology. The tympanic membrane or eardrum. Figurative meaning: Tympanum: 2. Architecture. A vertical recessed triangular space forming the centre of a pediment, typically decorated. 2.1. A recessed triangular space over a door between the lintel and the arch.	Relief forms were sculpted on façades of churches and cathedrals, especially on the columns, tympanum and archivolts of doorways. (Myers, 2014, p. 137)	Each entrance was flanked by a tympanum and archivolts and was usually divided by a column. (García Sebastián et al., 2016, p. 152)
Rib: 1. Each of a series of slender curved bones articulated in pairs to the spine (twelve pairs in humans), protecting the thoracic cavity and its organs. Figurative meaning: Rib: 2.1. Architecture. A curved member supporting a vault or defining its form.		Caliphal ribbed vault: composed of intersecting ribs that don't pass through the centre. (Myers, 2014, p. 89)	The frame of the cathedral consists of ribbed vaulting that rests on enormous pillars and columns. (García Sebastián et al., 2016, p. 155)

3.3. Discussion

After having presented the results of the metaphors identified both in Spanish and in English, I am now in a position to discuss and compare the metaphors in both languages. Tables 4 and 5 show the correspondence between the metaphors found and the parts of the body to which they refer, as well as their etymological origin and their equivalent in English or Spanish.

Table 4 *Metaphors in Spanish: body part correspondences, origin and equivalents in English*

Metaphors in Spanish	Body part correspondence	Origin (DRAE)	Equivalent word in English (architecture)
Cabecera	Cabeza	De cabeza.	_ 5
Tímpano	Tímpano	Del lat. mediev. <i>tympanum</i> 'tímpano del oído', este del lat. <i>tympănum</i> 'tambor', y este del gr. τύμπανον <i>týmpanon</i>	Тутрапит
Nervio	Nervio	Del lat. vulg. nervium.	Rib
Brazo	Brazo	Del lat. <i>brachĭum</i> , y este del gr. βραχίων <i>brachiōn</i> .	Transept
Frontón	Frente	Del aum. de fronte.	Pediment

Table 5 *Metaphors in English: body part correspondences, origin and equivalents in Spanish*

Body part correspondence		Equivalent word in
	Origin (OD)	Spanish
		(architecture)
	Early 17th century via Latin from	
Tympanum	Greek tumpanon 'drum', based on	Tímpano
	tuptein 'to strike'.	
	Old English rib, ribb (noun), of	
Rib	Germanic origin; related to Dutch	Nervio
	rib(be) and German Rippe.	
	Correspondence	Origin (OD) Early 17th century via Latin from Greek tumpanon 'drum', based on tuptein 'to strike'. Old English rib, ribb (noun), of Rib Germanic origin; related to Dutch

3.3.1. Comparison of metaphors in both languages

Below is a detailed analysis of each of the metaphors identified, both in the CLIL textbooks and in the non-CLIL textbooks. In addition, other architectural elements that do not involve embodied metaphors as such are also discussed, since their etymological origin and evolution associates them with some parts of the body, something that can be also interesting when addressing this aspect in the classroom.

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⁵ There is not a word in English that refers to this part of the floor plan of a building. Only words that designate the different structures that are built on it (e.g. apse, chapel) have been identified.

The discussion is accompanied by some images that illustrate the architectural elements or parts of the temple at issue. Some of them have been taken from the textbooks composing the study sample. Others, however, belong to the two textbooks (Bachillerato and COU levels) previously reviewed, since their images were more clearly depicted.

• The head: cabecera

In terms of the results, there is clear evidence that the concept of 'head' is present in the language of art, and more precisely in the language of architecture, in the Spanish language. However, an exact equivalent semantic extension in the English language has not been found.

The term *cabecera* is used in Spanish to designate a part of the plan of a building, in most cases referring to the floor of a temple or cathedral (see Figure 2). Therefore, the Spanish language proposes a horizontal conception of the building, comparing the shape of the plan with the figure of the human body. In this sense, the part that resembles the head of the human body is called *cabecera* not only for being the 'highest part' of the building —if we visualize the plan in an upright position, as if it were printed on a paper—, but also because it usually has a circular shape.

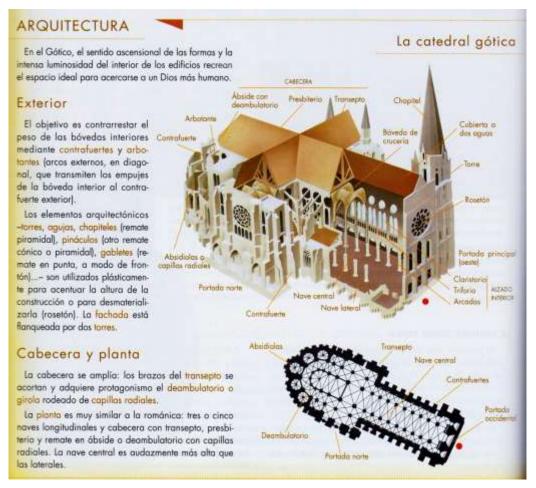


Figure 2. Spanish *Cabecera*. Reprinted from Llacay Pintat, T., Viladevall Valldeperas, M., Misrahi Vallés, A., & Gómez Cacho, X. (2010). *Nuevo Arterama. Historia del Arte. Bachillerato* 2. Barcelona: Vicens Vives.

On the other hand, in English we cannot refer to this part of the plan of a cathedral as 'the head of the cathedral' as the term is used in the case of 'the head of the bed'. The main reason for this is perhaps that the cathedral is not conceived in a horizontal sense, but rather it is devised vertically, and that therefore the upper part of the floor of the building is not identified as 'its head', since the floor would be, in this case, the lowest part of it. If applicable, it could be assumed that the head of the building was the cupola, as this is its highest part. Nevertheless, no semantic extension of the word 'head' is used in English to designate this or any other part of a building.

However, references to the human head related to the English word 'dome' (in Spanish *cúpula*) have been found. According to the Online Etymology Dictionary (etimonline.com), during the Middle Ages, German *dom* and Italian *duomo* were used to refer to 'cathedral' (meaning 'God's house'), and English adopted this word to designate the 'cupola' (Figure 3). It was from this term when the head began to be called 'dome' in informal English, as the Oxford dictionary determines in one of the

entries for this word, since the human head resembles a dome in the sense that it is the part that 'crowns' our body and it has a rounded shape.

Therefore, the word 'dome' does not come etymologically from the word 'head', as it happens in Spanish with the word *cabecera*, which comes from *cabeza*. Such relationship has been established in an opposite way and, therefore, as it is not a semantic extension of the word 'head' it cannot be classified as an embodied metaphor.

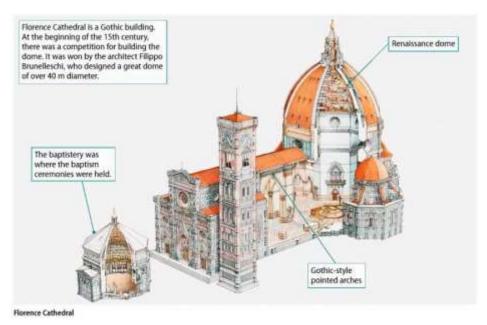


Figure 3. English Dome. Reprinted from Myers, C. (Ed.). (2014). Social Sciences. Oxford CLIL. ESO 2. Oxford University Press.

• The tympanum

In the case of the tympanum, this figurative extension of the word coincides in both languages, designating the profusely decorated space between the lintel and the archivolts of the facade of a church or the space located within the pediment of the classical temples (see Figure 4). In this sense, the similarity we find with the eardrum of the human being is that it is a vertically recessed space in the facade of a building, just as this membrane is positioned inside our ear.

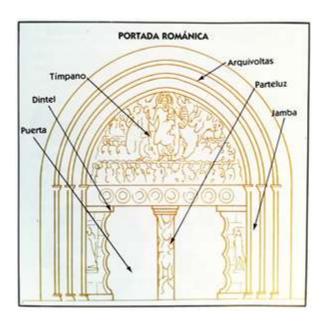


Figure 4. Tympanum. Reprinted from Fernández, A., Barnechea, E., & Haro, J. (1993). Historia del Arte.

Barcelona: Vicens Vives.

In addition, this resemblance leads me to think that because it is decorated and provided with numerous sculptures, the main function of this part of the church or cathedral may be to get the attention of the people before entering the temple, in the same way that we capture sounds through our ears. Moreover, the tympanum of the building serves as a boundary between the outside and the inside, just as the tympanic membrane of our ear separates the middle ear from the outer ear.

In this case, the embodied metaphorical extension is established in the same way in both languages, since in each of the dictionaries used both a literal definition for the word eardrum associated with that part of the human ear and a definition related to architecture that refers to the same architectural element is collected.

• Nervios vs. ribs

Focusing on a ribbed vault (in Spanish *bóveda de crucería* or *bóveda nervada*) it can be appreciated that the concrete element (body part) from which this semantic extension derives is different between the two languages under examination, Spanish and English.

According to Llacay Pintat et al. (2010), 'la bóveda de crucería es el resultado del cruce entre arcos apuntados u ojivales que forman el esqueleto de nervios' (p. 129). Thus, the comparison that is established between such vault and the human body lies in

the similarity between its arches and the nerves of the body. In the same way, a connection is established between this set of nerves with the human skeleton, since these form a resistant structure that may remind our thoracic cavity.

Conversely, in the English language the pointed arches that form the vault are not compared with the nerves of the human body, but with the ribs, hence the name of 'ribbed vault' (see Figure 5). Therefore, the established semantic extension is different between both languages, although the English 'ribbed vault' has a certain relationship with the comparison made in Spanish between the pointed arches of the vault and the human skeleton (*esqueleto de nervios*), since the ribs are actually part of it.

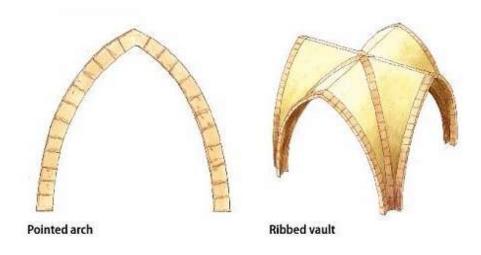


Figure 5. Pointed arch and ribbed vault. Reprinted from Myers, C. (Ed.). (2014). Social Sciences. Oxford CLIL. ESO 2. Oxford University Press.

The front

As the results show, in the sample analyzed in Spanish the use of the word *frontón* in architecture has been identified. This semantic extension of the word *frente* is used to designate an architectural element of classical origin that consists of a triangular or curved section disposed on the upper part of the façade or the porch of a building. In this sense, the embodied metaphor that is established implies the association of this architectural element with the forehead of the human body, since it constitutes the upper part of the face and, consequently, the front part of our head.

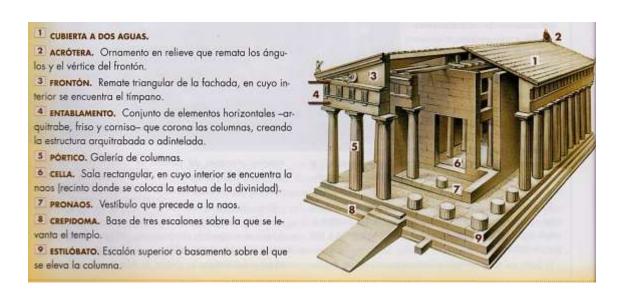


Figure 6. Frontón. Reprinted from Llacay Pintat, T., Viladevall Valldeperas, M., Misrahi Vallés, A., & Gómez Cacho, X. (2010). Nuevo Arterama. Historia del Arte. Bachillerato 2. Barcelona: Vicens Vives.

However, English does not share the same underlying motivation with Spanish, since the name given to this part of the building in English is 'pediment', which has nothing to do etymologically with the root of the word 'front'. Nevertheless, in English we can find the expression 'the front of the building' referring to the front part of a building in general and not only to the specific section that is referenced in architecture by using the word 'pediment'.

• Brazos and transepto

If we look at the floor of a church, particularly a Romanesque church, we can realize that it has the shape of a cross ('Latin cross plan'). This cross is formed by a 'transept', which consists of a nave that perpendicularly crosses the longitudinal body of the temple. It has been identified that in Spanish the word *transepto* is used as much as the word *brazos* ('arms') to designate this part of a church or cathedral (see Figure 7). In this sense, it can be observed how an embodied metaphor is established by relating this part of the building with the arms of the human body, since in some way the transept provides the building with two endpoints that resemble the extremities of the human body. However, the definition of the word *brazo* does not appear in the DRAE in terms of architecture, but to find the definition related to it, one must look up the word *transepto*.

In relation to this embodied metaphor, the conception of horizontality that Spanish presents when coding the structure of a building can be appreciated again. If we look at the floor of a cathedral it can be seen that just as the concept of 'head' is attributed to the 'higher' and rounded part, an association is established between the arms of the human body and the part that is located below the *cabecera* and that also consists of two ends. Therefore, the plan of the building is conceived as the figure of the human body as a whole.

This is, again, a metaphor that does not correspond between both languages, since it has only been identified in Spanish.



Figure 7. *Brazos* and *transepto*. Reprinted from Llacay Pintat, T., Viladevall Valldeperas, M., Misrahi Vallés, A., & Gómez Cacho, X. (2010). Nuevo Arterama. Historia del Arte. Bachillerato 2. Barcelona: Vicens Vives.

As previously stated, some words have been found in the language of architecture that cannot be considered embodied metaphors since they do not constitute semantic extensions of words referring to parts of the body, but which are related to some of them due to their origin and etymological evolution. In this sense, I consider that the introduction of etymology in the teaching of both language and content can help in the acquisition of vocabulary and can enrich the linguistic knowledge of the students. Therefore, it seems appropriate to allude to two words used in architecture whose relationship with body parts is not as clear as that presented by the embodied metaphors previously discussed, but which I believe can help students to better memorize and remember these concepts. One of them is the word *pechina*, which has been identified

in the two textbooks analyzed in Spanish. The other is the word 'facade' or 'façade', found in the two English textbooks.

• Pechina or pendentive

The etymological meaning that the word *pechina* encloses has only been identified in Spanish, since its equivalent in English is the word 'pendentive'. According to the Oxford dictionary, a pendentive is 'a curved triangle of vaulting formed by the intersection of a dome with its supporting arches' (see Figure 8). In terms of the origin of this word, it comes from the French adjective *pendentif*, *-ive*, from the Latin verb *pendere*, meaning 'hanging down'.

However, the relationship between the Spanish word *pechina* and the human body is rather curious and controversial. As defined by the *Real Academia Española Dictionary (DRAE)*, the word *pechina* comes from Latin *pecten, pectinis* —from the Latin verb *pectere*, meaning *peinar*, *cardar*—, which in Spanish means *peine* (in English 'comb'), but which was already used in Latin to designate pubic hair, especially of women, and the *venera* shell (in Spanish *vieira*), associated with the goddess Venus and also being a symbol of the pubic triangle. However, it is very likely that the root of *pectere* is the same as that of *pectus, pectoris* (in Spanish *pecho*, in English 'chest'), and that the term *pectus*, which was originally applied only to the chest of man, referred to the hairy part of the thorax (Anders, 1998).

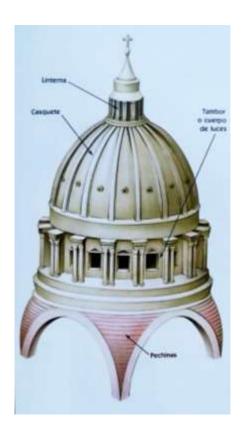


Figure 8. *Pechinas*. Reprinted from Fernández, A., Barnechea, E., & Haro, J. (1993). Historia del Arte. Barcelona: Vicens Vives.

Nowadays the word *pecho* is used in Spanish to designate the outer front part of the body, from the neck to the belly, whether it belongs to the body of the man or to the breasts of the woman. Therefore, considering the shape of these architectural elements, the person who decided to call them *pechinas* could have wanted to refer to a woman's chest, since the triangular and curved shape that they present resembles in a way to this part of the female anatomy or the pubic triangle, too.

Facade

The word 'facade' (also façade) comes from the Italian word *facciata* (meaning 'the front of a building'), which in turn comes from the Latin *faccia*, which means 'face'. Thus, an etymological bond can be identified between the use of the word 'façade' in English to designate the principal front of a building and a part of the human body, the face. Although we also use the word *fachada* in Spanish to designate that part of a building, it does not have the same etymological root as the word *cara*, which is what we call the front of a person's head.

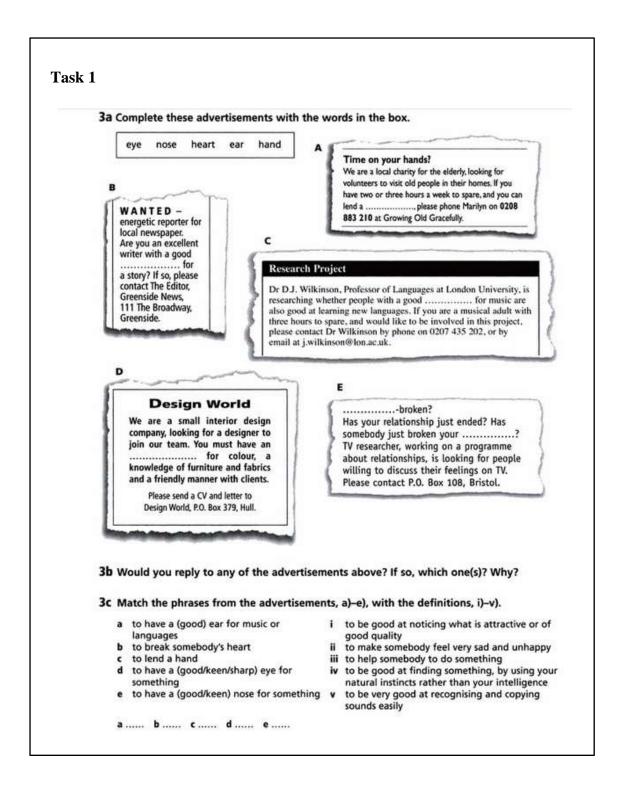
As has been shown, metaphor is very present in the History subject and more specifically in the language of History of Art. However, the correspondences between the architectural elements analyzed and the parts of the human body are not directly reflected in the textbooks under examination, so students are not encourage to establish these associative processes that, in my opinion, can greatly benefit them when it comes to learning the content and the language (i.e., vocabulary) of the subject through a foreign language.

4. CL-ORIENTED PEDAGOGICAL PROPOSAL

According to Mehisto (2012), 'CLIL-specific learning materials support the creation of enriched learning environments where students can simultaneously learn both content and language' (p. 17). However, creating quality CLIL materials is a major challenge for teachers, who need to bear in mind a series of aspects to ensure such materials reflect good pedagogical strategies associated with CLIL. In this sense, the success of CLIL practices not only lies in the teacher's ability to maintain the dual focus on content and language, but to apply all the different criteria required to create, select and adapt CLIL learning materials. In the same way, the shortage of CLIL materials has lead teachers to create their own ones in order to provide students with useful resources that meet the necessities of a demanding educational landscape and foster the achievement of the stablished learning outcomes.

As Deignan et al. (1997) stated, 'while students may learn to use some frequent metaphors without reflection, they are likely to achieve more if they are encouraged to conscious reflect on the metaphorical nature of language' (p. 353). Hence, bearing in mind the main principles of the Cognitive Linguistics theory and those results obtained in the present study in relation to the analysis of the embodied metaphors found in the subject of History of Art, a series of tasks aimed at introducing metaphor in the CLIL classroom will be proposed. These activities may be used to teach content and language together and, in turn, to bring students closer to the understanding and application of figurative language when communicating.

I have decided to begin this proposal by including an activity by Lazar (2003) to encourage discussion of metaphor. This activity belongs to the book *Meanings and Metaphors: Activities to practise figurative language*, from section 2, which is entitled *The heart of the matter: body parts*.



I have chosen this particular activity since I consider it can be a good option for students to begin to explore figurative associations for parts of the body and practise words and phrases connected with these associations. Therefore, it can be regarded both as a starter activity for the introduction of content vocabulary from a cognitive linguistic perspective in the CLIL History of Art class or as an activity to be carried out during a split session in which the language specialist would introduce these associations to students.

Task 2 presents some metaphorical expressions from the same semantic field: body parts. Thus, students are encouraged to compare these patterns with their L1 in order for them to realize that although they may find that some expressions translate very closely, not all of them have an equivalent in their mother tongue. To design this activity I have used the *Corpus of Contemporary American English (COCA)*, from which I have selected four sentences that include metaphorical expressions related to some parts of the body.

Task 2

Underline the words and expressions in the following sentences which are associated with body parts.

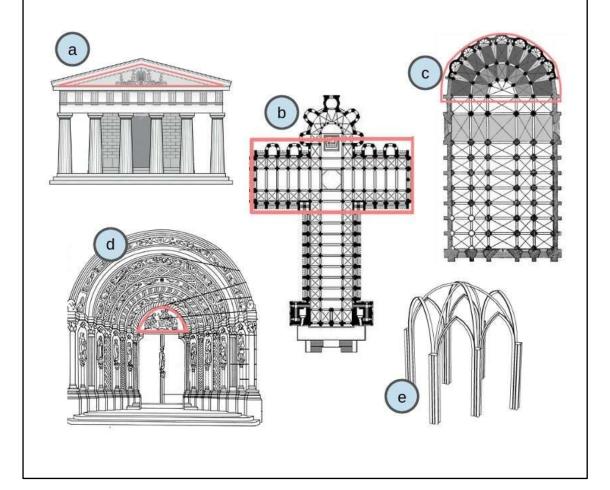
- 1. "Claire, can you give the lady her book?" Finally she hand it to me, still serious.
- 2. He stood by the head of her bed. He still had her coat. She was getting relaxed and sleepy-looking.
- 3. "Come on," I said. "Give me a hand. It's for a good cause."
- 4. Gunshots were coming from below, and as I reached the head of the stairs I saw two soldiers lying by the front door.
- What do these words mean in these sentences? Use a dictionary to check your answers.
- Can you use any words for body parts in your language with these meanings?

In Task 3 the concept of *embodiment* is introduced to the students in an implicit way. The main objective of this task is that they start thinking about the possible similarities between our body and some architectural elements. In this sense, students are provided with a series of images that they will have to associate with some body parts. The goal is not for them to guess all the correspondences, but to ask themselves why they are similar and that this task leads to a discussion in the classroom in order to share opinions.

Task 3

Look at the following pictures. What part (or parts) of the body do these images resemble? Justify your answer. In some cases there is more than one possible answer.

head-nerves-arms-tympanum-front-ribs



After having presented some architectural elements to the students, they will have to identify their names in Spanish and then scan their textbooks to find their equivalent names in English in order to perform Task 4. The teacher will act as a facilitator and will help them with those concepts that do not appear in the textbook.

Task 4

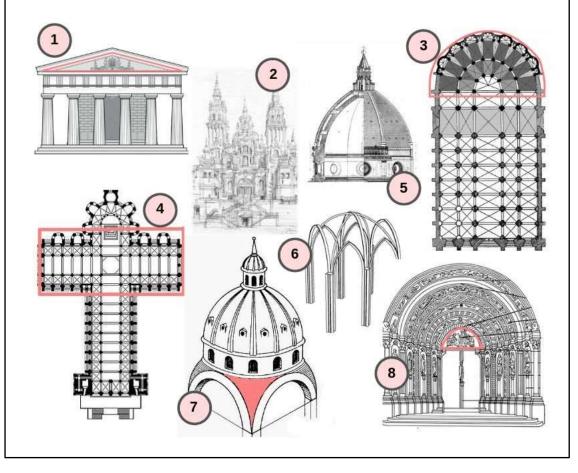
The following words are used to refer to architectural elements or parts of a church or cathedral. Do they have an equivalent word in English? If so, how are they called? Check your textbook to find the answers.

Cabecera Fachada

Cúpula Bóveda de crucería

Tímpano Frontón
Pechina Transepto

- Then match them with their correspondent pictures.



Task 4 will be accompanied by a teacher's explanation focusing on the underlying motivations for the metaphors used in both languages to designate certain architectural elements or parts of a temple. In this way, students will become aware of the similarities and differences between the L1 and the L2 and they will be able to put

into practice what they have learnt by completing tasks 5 and 6. The sentences included in these activities have been extracted from the 4 textbooks analyzed and the 2 dictionaries used in the analysis.

Task 5		
Complete the following sentences with the correct word in Spanish.		
transeptos – cabecera – frontón – tímpano – nervios – brazos – pechinas -		
cabeceras		
La bóveda de crucería está construida sobre que trasladaban el peso de la bóveda a los pilares y a los contrafuertes.		
2. En el extremo de la iglesia está la, donde se sitúa el altar.		
3. Las esculturas de los cuatro evangelistas y de los apóstoles se localizan,		
sobre todo, en la parte superior de la portada, llamada		
4. Se llama al remate triangular de la fachada de un templo, en		
cuyo interior se encuentra el tímpano.		
5. Las con forma semicircular se denominan ábsides.		
6. El peso de esta cúpula es sostenido por un sistema de contrafuertes y		
semicúpulas en el exterior y de en el interior.		
7. La planta de cruz latina está formada por dos, también		
llamados, que se cruzan formando un crucero.		

Task 6 Choose the best word in English to complete the following sentences. 1. A ______ is a rounded vault forming the roof of a building or structure, typically with a circular base. a. tympanum b. dome c. column

2. (Gothic architects used vaults to give the buildings flexibility in roof and
V	wall engineering. The typical Gothic vault was composed of intersecting
_	that form a resistant structure.
a	a. ribs
b	o. nerves
C	e. archivolts
3. I	Each entrance was flanked by a and archivolts and was usually
Ċ	livided by a column.
a	a. dome
b	o. vault
C	c. tympanum
4. T	The is the principal front of a building, which faces on to a
s	street or open space.
a	a. pinnacle
b	o. façade
C	c. dome

The answer key to all the activities can be found at the end of this piece of work, in the Appendix section.

5. CONCLUSIONS

The present MA dissertation has attempted to start exploring the presence of metaphor in the field of Art in secondary CLIL and non-CLIL texts. Although numerous research studies have been carried out from the perspective of applied linguistics, little attention has been paid in the literature to the presence of conceptual metaphor in CLIL, in general, and to metaphor as a communication tool in CLIL, in particular, although Alejo-González and García-Bermejo's publication (in press) can be taken as an exception. The study of metaphors in the language of architecture has shown some of the ways in which metaphoric use varies across two languages, from which it has been inferred that students may find easier to learn metaphors in a foreign language if they are aware of how these work in their own language, too. However, there is still

much research to be done in order to prove, in an empirical way, the benefits of cognitive linguistics-oriented methodologies for both CLIL and non-CLIL learners.

The conducted analysis has produced qualitative results through which it has been possible to identify and analyse the presence of embodied metaphors in the subject of Geography and History at the level of second year of compulsory secondary education. The analysis has resulted in some limitations such as the inability of applying validated procedures for the identification of metaphors or the restriction of the sample itself. Moreover, there has been no opportunity for the use of the designed CL-oriented activities in a real context.

Therefore, further research could be done through the application of quantitative techniques that result in a broader and more accurate vision of the presence of this type of metaphor in the given context. In addition to this, it would be very interesting to implement the proposed activities in real classrooms in order to get results that reflect the effectiveness of these materials when teaching the contents of the subject using English as a vehicular language.

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APPENDIX: CL-oriented Pedagogical Proposal's Answer Key

Task 1

3a A hand B nose C ear D eye E heart - heart

3b Student's own answers

3c a v b ii c iii d i e iv

Task 2

- 1. "Claire, can you give the lady her book?" Finally she <u>hand it to me</u>, still serious.
- 2. He stood by the head of her bed. He still had her coat. She was getting relaxed and sleepy-looking.
- 3. "Come on," I said. "Give me a hand. It's for a good cause."
- 4. Gunshots were coming from below, and as I reached <u>the head of the stairs</u> I saw two soldiers lying by the front door.

Task 3

a front **b** arms **c** head **d** tympanum **e** nerves / ribs

Task 4

Cabecera: no equivalent word - 3

Cúpula: dome - 5

Tímpano: tympanum - 8 **Pechina**: pendentive - 7

Fachada: facade / façade - 2

Bóveda de crucería: ribbed vault - 6

Frontón: pediment- 1 **Transepto**: transept - 4

Task 5

1 nervios 2 cabecera 3 tímpano 4 frontón

5 cabeceras **6** pechinas **7** brazos - transeptos

Task 6

1 b 2 a 3 c 4 b