Historical literacy in bilingual settings: Cognitive academic language in CLIL history narratives

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ABSTRACT

Language competence has proven to vary substantially across school disciplines. This paper explores historical literacy, a major research issue in current European language policies. Specifically, it reviews the literature on how history content relies on language structures and how the ability of students to tell historical narratives depends on their individual competence level, both in a first and second language. However, historical biliteracy has to date been regarded mainly as a theoretical construct which would benefit from an empirical analysis that tests the descriptors provided for historical communication in a first and second language (Council of Europe, 2015). To this end, this paper conducts a corpus study of the bilingual historical narratives of secondary school students and provides evidence of the major cognitive discourse functions (CDFs) that appear in the literature (hypothesising about history, explaining history, describing historical events, expressing causality, taking an ideological stance, etc.). The results are tabulated and discussed, providing conclusions that may prove useful for L2 and history learning and curriculum development in bilingual education and CLIL settings. Thus, this paper intends, for the first time, to provide empirical support for L2 historical literacy classifications and to describe the integration of history content and language (L2) by the end of compulsory schooling in secondary education.

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1. Introduction

In Ancient Greece, history defined the narratives of the remarkable events that transpired. History making, therefore, called for outstanding literacy skills so the narrator could represent in words the facts in a credible and sound manner. In their writings, historians reflected the truth and provided a permanent linguistic rendering of the past. Historiography called this the linguistic turn, an ascertainment that language shapes history and narrative language structures deeply affect the historical representation of the past (Carrard, 1992; Lledó, 2011; Yilmaz, 2007).

A classical discipline found in the curriculum in all world-systems, history places high academic demands on learners. Historical texts require powers of interpretative reasoning and the development of a personal voice in the presentation of narrated events. As a result, historical literacy (Levstik & Barton, 2001; Nokes, 2013) has become a cognitive academic language skill that global education is endeavouring to consolidate.

The interface between language and history has been researched from many angles in the educational literature. Some research strands have described the rhetorical structure of historical narratives, under the label of narratology studies (Adam, 2011) or rhetorical genre studies (Collins, 2014). Also focusing on the interface between language and history, corpus linguistics has mapped out the discipline’s language specificities and revealed that history produces a particular linguistic texture with distinctive sentence and morphological features (Asención-Delaney & Collentine, 2011; Biber, Davies, Jones, & Tracy-Ventura, 2006). Other studies have analysed historical language from a discursive perspective, and provided history curriculum guidelines based on the language demands of school tasks (Coffin, 2006), or considered the particular genres of the discipline in relation to their discourse-semantic effects (Hyland, 2002, 2004; Lorenzo, 2013; Martin & Rose, 2003; Martin, Maton, & Matruglio, 2010).

Multilingual education has given a twist to the study of the interface between language and history. Students around the world now learn history in a second language, either because the number of vehicular languages has increased with the global promotion of bilingual schools or because classes have to cater for minority language students who learn in a language that is not their mother tongue. Examples include American history taught in English to Hispanic students in the USA (Achugar, 2009), bilingual Middle-Eastern history lessons given in Arabic and Hebrew in Israel (Adwan & Bar-on, 2003) or the bilingual teaching of European history in
Franco–German streams (Briendbach, Bach, & Wolff, 2002). A curricular venture pointing in specifically this direction is the Council of Europe’s plan to benchmark ‘historical communication’ for school-level learners (Beacco, 2010). Of late, the Council of Europe has set out to chart the language competence needed to acquire different forms of historical knowledge in a L1 and L2, a new research perspective referred to as languages of schooling (Council of Europe, 2015). The goal of policy-making and academics here is not only to lay the foundations for efficient bilingual education, but also to equip national education systems for multilingual school populations with a strong presence of immigrants and refugees.

All in all, the effectiveness of these multilingual education schemes worldwide share a common denominator: subject content learning in an L2 depends critically on language competence or as is called in the bilingual research literature SLIC (second language instruction competence) (MacSwan & Rolstad, 2003). As the authors point out “SLIC denotes the stage of L2 development in which the learner is able to understand instruction and perform grade-level school activities using the L2 alone” (p. 338) Although conceptually useful, educational bilingual research has not provided a linguistic analysis of the limits, progress, or thresholds of the SLIC construct.

This bilingual educational trend has heightened interest in the interface between language and history for the simple reason that bilingual teaching requires language structures to be foregrounded so content can be learned, an educational process called sheltering, scaffolding or integrating depending on the bilingual tradition. In spite of this growing concern, some aspects of history and second language connections remain unexplored. More precisely, there is little understanding of second language historical literacy, namely, how cognitive academic language competence is arranged with historical content. Without a proper description of the parallels between history knowledge construction and academic language competence, we tend to overlook the existing aspects and evolution of historical syntax (the syntactic structures more prone to appearing in the discipline of history) or historical communication (the notions and functions of historical semiotics). This lack of understanding has grave educational implications since, in the absence of a proper account of language and history integration, some of the major issues of history education remain elusive, chief among them: (a) the feasibility of teaching history in a second language in compulsory education; (b) the exploration of historical academic functions that may or may not develop and could interfere with content-learning; and, finally, (c) the curriculum planning of bilingual history education in accordance with first and second language proficiency levels. This study looks at precisely the interface between history and language, with the overall aim of describing this integrated competence known as historical literacy. Furthermore, historical literacy in a second language is now by all accounts a component of the appropriate linguistic capital that society demands (Lillis, 2001).

1.1. The expression of historical knowledge structures

Interpreting and giving an account of the past are elaborate skills. With time, infants develop cognitive resources which enable them to interpret the past in ever more sophisticated ways. In the early stages, the events that draw their attention are those occurring at present in the immediate surroundings of the speaker (child studies call the language used for the description of these events here and now language). Later in life, more distant territories are explored and with attention reaching further comes the understanding of a historical dimension. At this stage, individuals do not only look back and forth and describe the passage of time, but can also consider the relationship between concurring episodes or events happening at distant points in time, even abridging centuries; a key historical function called backshifting. The stages of historical thinking are common knowledge, starting with a first level, which is purely narrative: an account of events over time; followed by a more demanding skill involving the exploration of causes and consequences, and eventually culminating in the expression of multi-factorial causality; and, finally, a third level coinciding with the consolidation of a personal ability to judge and take an ideological stance on the past (Coffin, 2006, 2009). During the early stages, there exist clear limitations: young learners regularly fail to arrange historical events on a timeline and instead rely on the calendar dimension of time. As a result, anything happening during the first months is believed to precede other incidents occurring later in the year. Instead of chronological time measured in years and centuries, their personal time, marked by the school calendar, frames their reasoning. For instance, the discovery of America (October, 15th century) is believed to have taken place before the birth of Jesus (December, 1st century) (Díaz Barriga, García, & Toral, 2008; Martin & Rose, 2003). Cognitive educational research has pointed out further constraints in history learning at early ages which lead to historical misconstructions. Featuring among these are presentism – students surround past actions with a present bias; a concrete understanding of abstract historical notions; the provision of anecdotal and personalist causal explanations; a simple and static representation of past events, among other indications that students only develop a complex, dynamic understanding of history after years of schooling (see Carretero & Van Alphen, 2014; Voss & Carretero, 2000). By the same token, during the early stages students have little command of synchronicity management (placing events at the same or different points in time), causality links (a cause and consequential sequence which helps to explain states of affairs and historical turns), or the assessment of historical facts (taking a personal stance on events, including critical assessment), among other historical discourse functions.

Apart from these functions, history uses specific cognitive tools to manage content area knowledge relying on advanced language competence and historical heuristics. When students reproduce historical content, they have to interpret and consider multiple sources of information (sourcing), contrasting them and checking their consistency (corroboration), before finally assessing events within their spatial and temporal limits (contextualization) (Wineburg, 1998). Without these heuristics, history is no more than a story, a narrative belonging to the realm of fantasy rather than that of science or, to put it in classical terms, to mythos rather than logos.

As a result of this development of skills, history learning is often mapped out piecemeal in education. Students between the ages of 11–13 are merely required to record historical information; during mid-adolescence (14–16), they are requested to explain complex causes in the construction of the past; and finally when aged between 16–18, they are expected to take a personal stance and present arguments about events with critical and personal interpretations. Recording, explaining and arguing constitute, therefore, three stages in historical literacy (Coffin, 2006). Before students attain historical literacy, they are inclined to dualistic thinking (labelling characters as good or bad) and stereotyping. They lack, in short, expertise in historical knowledge construction, what has been termed an epistemic stance in the discipline (Nokes, 2013).

1.2. The development of cognitive academic language in an L2

Historical thinking relies heavily on language competence and competence in academic language is gained in formal education. Although normally unexplored and often ill-defined, national curriculums tend to lump together language and content objectives (see Lorenzo & Dalton-Puffer, 2016 for an analysis of history curriculums in different European countries). Overtly or covertly, all national curriculums take for granted that literacies differ from
area to area and embrace the principle that ‘the disciplines show differences in how they create, evaluate or disseminate knowledge and those differences are substantiated in the use of language’ (Shanahan & Shanahan, 2008:48).

Recent contributions to literacy describe language categories of all kinds – lexicogrammar, functions and genres – at different competence levels. Initially, there is an appearance and expansion of certain complex structures, which constitute the seedbed of literacy (see Christie & Maton, 2011; Christie, 2012; Lorenzo & Rodríguez, 2014). At higher competence levels, there is a better command of academic language, also present in historical language. These advanced language categories appear throughout academic texts, whether expressed in a first or second language, since interlingual crossovers are well-documented, especially in writing (Schoonen, Snellings, Stevenson, & van Gelderen, 2009).

Language and content are connected to such an extent that we could even speak of a historical lexicon, syntax or discourse. Corpus study findings show that particular language features appear more often in historical texts. Biber et al. (2006) holds that these specific linguistic features together form a precise written register known as informational reports of past events. Briefly put, this dimension includes only the preterit tense (but not the imperfect), reflects past events with little background description, and introduces numerous proper names rather than 3rd person pronouns. Another distinctive feature of these reports is that they produce highly informational prose: long words and premodifying attributive adjectives. Also related to L2 history learning, Llanes and Morton (2010) have found that in the lower grades of secondary education history is narrated as personal anecdotes, and the abstract causes that constitute historical processes are usually ignored. Both cognitive and language constraints are believed to work in combination here.

Likewise, a number of scholars in the USA have isolated language features of special importance in historical texts with the intention of enhancing them and making them more noticeable for students learning history in a second language (Oteiza, 2009; Schleppegrell & Colombi, 2002; Schleppegrell & Oliveira, 2006; Zwiers, 2006a, 2006b). As part of this research strand, Achugar (2009), Achugar and Schleppegrell (2005), and Achugar and Carpenter (2014) have shown that historical competence varies. Some students develop a more authoritative voice and show a better understanding of historical discourse functions like agentiveness (who did what) and causality (why things happened). For this reason, they make linguistic choices and shift from exophoric reference (‘he’) towards a combined use of external and internal references (‘they’ and ‘the author’).

In studies on advanced bilingual literacy, software-based analyses have been conducted on school corpus of historical narratives, rendering a detailed evaluation of lexical and syntactic features at different school levels. The results show that central areas in sentence grammar and historical syntax develop over time. These include nominalization, essential for grammatical metaphor, adverbial subordination, a major resource in complex historical processes, and conseqeuence temporal, to wit, the proper use of complex past time frames plainly indispensable for the management of historical time in discourse. Differences in competence levels also involve lexical aspects: the higher the school level, the broader the lexis, with considerable differences in metrics such as lexical variation, type-token ratio, verb diversity and lexical word diversity (Lorenzo & Rodríguez, 2014). This is also the case of syntax as regards nominalization (Parkinson & Musgrave, 2013) and clausal subordination (Bulte & House, 2014). From all these studies it follows that syntax and lexis develop over the school years, with many students reaching advanced levels of competence in historical prose.

On the basis of the aforementioned, we can conclude that study findings have focused mainly on language differences at lexical and syntactic levels, although without providing a functional description of historical language. In other words, if academic language entails two major levels – lexicogrammar and functional–notional language – we simply do not know how languages resources are arranged in the context of historical discourse to make recurrent meanings of the discipline, like causation or agentiveness, especially beyond the clause (Martin & Rose, 2003). Competence in historical literacy does not depend so much on sentence length or lexical variety, but rather on the accurate expression of historical functions: whether the causes of events are identified and expressed properly; whether historical transformations are adequately worded and compared to previous situations; or whether students manage to contemplate alternative scenarios which might have changed the course of history. Without this, students are deprived of a voice; they lack an individual understanding of how events unfolded and are mostly incapable of offering their own interpretation of the story.

These historical heuristics, expressing causality and comparing events, are but two of the many cognitive discourse functions of the discipline. Students also explain, refute, select, deduce, contrast, imagine, or judge past events, to name but a few of the myriad of cognitive operations that they entertain. These operations have a corresponding linguistic articulation, or representation, which is worded by students as they choose. Taxonomies of cognitive discourse functions (CDF) abound both in the study of historical disciplines (Husbands, 1996) and second language learning (Chamot & O’Malley, 1994).

With the multilingual education boom of late, a new taxonomy of cognitive discourse for second language history learning has emerged (Dalton-Puffer, 2013), which adapts the seminal categories of Anderson et al. (2001) – based on those by Bloom – to the specifics of second language acquisition. After a thorough corpus revision, Dalton-Puffer (2013) reduced the number of categories to a manageable amount of well-defined constructs: classify, define, describe, evaluate, explain, explore, and report. Academic content of every description, such as history for instance, relates to these seven major functional categories, which map out the meaning potential of students’ production in bilingual settings.

2. The study

The notional–functional description of historical literacy is necessary for curriculum development and for content (history) and second language planning and assessment in multilingual settings. As already noted, language competence has undertaken a multi-level characterisation based on descriptors in the CEFR which are linked up to can-do statements, a functional rendering of what speakers and writers are able to accomplish with language as a general skill, viz. languages for no specific purposes as they are often called, for instance, EFL. But when the intention is to describe language competence vis-à-vis a content subject, the so-called languages of schooling, research is thin on the ground.

The Council of Europe has taken a theoretical approach to this issue, latterly focusing its efforts on the handbook entitled, The Language Dimension in All Subjects: Handbook for Curriculum Development and Teacher Training (Council of Europe, 2015), which is meant to lay the groundwork for the study of languages of schooling. However, this theoretical stance has yet to be supported by corpus data. Therefore, attempts to map the terrain of maths, science, or history in a second language are sound in theory, but lack empirical evidence (Vollmer, 2006; Beacco, 2010). This paper pursues that goal by providing an empirical reasoning for the established categories and by turning current institutional and scientific
concern into workable research hypotheses. This has led to the opening of a full research agenda that, in the words of Dalton-Puffer, should first address ‘specific research questions that need to be pursued are: which cognitive discourse functions are realised, when, how by whom? Is there a meta-level and if there how is it handled?’ (2013:241).

In the spirit of this quotation, this study poses the following research questions:

1) Which cognitive discourse functions (CDFs) are produced in a traditional bilingual setting by the end of secondary school?

The question explores the presence of CDFs that students formulate when dealing with historical school content. The meaning potential of the texts they produce depends on the historical functions they express; therefore CDFs are considered to form the bedrock of historical literacy. The response to this question will reveal whether students’ narratives match the Council of Europe descriptors for historical literacy, and also if they have reached the desirable second language instruction competence which makes learning through an L2 feasible. This question will also reveal potential gaps in key historical functions of which students may not have a full command. In other words, the idea is to check if there are any shadow zones in functional development in bilingual educational settings which may prevent the full acquisition of the skills necessary for narrating, analyzing and judging history. If gaps do indeed exist, the intention is also to discover how these impair historical literacy.

2) How do students flesh out linguistically the CDFs that constitute historical literacy? As opposed to the first question which probes into the occurrence of the CDFs, this explores their stage of development; namely, which language resources are used to convey historical content. This question ultimately refers to the nature of integration of content and language in bilingual settings, the cornerstone of bilingual learning as is visible in the acronym currently in use CLIL. The aim of this study is to explore the interface between language and content in a number of discourse functions (Nikula, Dalton-Puffer, Llinares, & Lorenzo, 2016).

On answering these two questions, the which and the how question, the ensuing results, we believe, will provide a consistent representation of second-language cognitive academic language in the content area of history learnt through a second language by the time students reach the end of compulsory schooling (10th grade) at the age of 16.

2.1. Participants

The population consisted of a class of 21 students in 10th grade, all aged 16 or about to turn that age during the school year, attending a bilingual secondary school – in an urban monolingual Southern European area in Western Andalusia, Spain – who had spent a minimum of five years receiving up to 40% of their curriculum in English as an L2, the minimum amount of tuition requested from schools by the education authorities so that they can be granted bilingual school status. History and Art were among the courses taught in an L2. Practitioners involved in bilingual schemes – L2 history teachers, language teachers, language assistants – received precise information on the goals of the study. The data was gathered at a state school that has been recognised by UNESCO for its 40-year-plus track record in implementing literacy programmes. For all its merits, the school is one of the centres of the bilingual school network which comprises over 1000 primary and secondary schools following the immersion model known as CLIL. It is standard practice now in the context of the study for state schools to support language competence with first and second language literacy programmes, including initiatives like school-genre maps, book fairs, and parent literacy programmes. In an attempt to enhance second language standards, each school has been provided with ad hoc L2 materials, native language assistants, and qualified content and language teachers. Although CLIL is a multivariate and multifaceted model, current research suggests that this approach enhances L2 learning (for a recent review on CLIL learning standards and the similarities between CLIL and immersion models, see Cenoz, Genesee & Corter, 2014). Prompted by institutional recommendations, CLIL programmes are growing exponentially and gradually replacing traditional foreign language programmes in Europe and elsewhere. There exists a large amount of research on the implementation and assessment of this teaching approach, with special issues in The International Journal of Bilingual Education and Bilingualism, System, and The Language Learning Journal. By all accounts, it is considered a practical form of immersive education which, by and large, is tackling the challenge of turning many monolingual education systems into bilingual schemes mainly, but not only, in Europe. The practitioners involved in this study – L2 history teachers, language teachers, language assistants – were specifically informed about the study goals. School heads and parents were also briefed and research approved by their respective school councils. CLIL implementation in Spain follows European policy guidelines. In monolingual parts of the country (Madrid and Andalusia, for instance) bilingual school networks have been founded and have multiplied over the last twenty years. With slight differences, this set up has been also popular in multilingual areas like the Basque Country, Galicia or the Balearic Islands. This implies teaching up to 40% of the curriculum in a European language, mostly English but French, German and Portuguese too. Although this has spurred educational and sociological debates, assessment policies show enthusiastic results in terms of second language competence gains.

2.2. Materials

Students were asked to produce two narratives on topics of their official history curriculum of Contemporary History in 10th grade: Avant Gard Art Movements and The Industrial Revolution. Students were requested to write an in-class history essay. The literature describes this type of historical text as an expository academic genre which allows for the rendition of three fundamental stages in recounting history: a sequence of events that occurred, a presentation and analysis of the causes, and, finally, a personal stance on the historical relevance of the issue including a moral or aesthetic assessment. During the previous weeks, the students had received instruction on those issues as part of their official history curriculum, now taught in English as an L2. Before the completion of the test, they were presented with some visual input in the form of historical illustrations which helped them contextualise the topic, followed by three questions which coincided with the three-stage approach to narratives (narration of events, causal explanation and personal stance): ‘What were the events in…?’ ‘What were the causes and consequences…?’ and ‘Can you make a personal assessment of this historical event?’ They were also asked to write a full narrative, with a minimum of 200 words and a maximum of 400, rather than answering each question individually. The questions, we believed, permitted the students to tackle the issue from a broad angle, as well as allowing for the spontaneous occurrence of key historical CDFs: reporting, explaining, defining, etc.

Narratives were then labelled with production dates and other relevant information such as the specific topic and school grades. The same corpus – in an extended version called SENECA, in honour of the renowned Roman philosopher who passed on reflections and insights on bilingual education born and bred in Roman Baetica, now (Spain) – had been used previously to study complex syntax and cohesion metrics by means of software analytics (Lorenzo &
Rodriguez, 2014). As mentioned above, although the said study offered a consistent snapshot of academic language in bilingual settings, its structural analysis lacked the functional insights that this paper intends to yield. So, despite the fact that the full corpus included narratives compiled throughout the secondary education stage, for the purpose of this study only those of the uppermost level were studied (viz. those of 10th grade students), totalling forty one. Our goal was by no means developmental or longitudinal, but rather focused on the form-function mappings of particular CDPs at a critical moment in the educational career of students: their final year of compulsory secondary education. As is known from other government research and educational reports, students in these bilingual programmes reach a CEFR level of between B1 and B2 in 10th grade and a L2 English level of between B2 and C1 in 12th grade, the end of post-compulsory education (Lorenzo, Casal, & Moore, 2010; Pérez, Lorenzo, & Pavón, 2016). These language levels imply advanced discourse competence, as described in the tables above.

2.3. Procedure and method of analysis

In previous studies, a computer analysis was conducted on the same corpus and syntactic and lexical complexity metrics incorporated in the software tool were examined. Chief among them were the abovementioned areas of language unit length and word diversity. However, the literature has expressed concern that automated analyses, for all their virtues, still produce significant ‘measurement noise’ (Bulte & House, 2014:48). If this is so for syntactic and lexical parameters, it could not be truer for functional categories. These are semantic units and, as has been widely known in linguistics since time immemorial, meaning is hard to categorise. Syntactic complexity and proficiency cannot be totally equated. For instance, Fitzgerald (2011) provides evidence that advanced asymmetric constructions, specifically those that avoid connectors and are less grammatically intricate, signal proficiency; and similarly Ortega (2003) claims that more subordinate texts are not necessarily more advanced. This has implications in the operationalisation of CDPs, whose boundaries are extremely flexible as functions; for instance, definitions can be as long as a book or as short as a word (Dalton-Puffer, 2013).

Although narratives are discourse-semantic units and functional meanings are represented beyond sentence boundaries, we needed language units of a manageable length, such as propositions conforming to the space limits of this paper. Propositions retain full functional value as they are essentially defined as ‘ways of categorising utterances and attitudes into equivalence classes, with respect to their information content’ (Sullivan, 2015:15–16). Propositions, then, amount to a flexible language unit, certainly more so than a sentence, which allows us to explore the meaning of full statements. This is an issue central to systemic functional linguistics, one of whose chief endeavours is the exploration of meaning beyond the clause (Martin & Rose, 2003). In any case, we do not intend to use strict boundaries in the presentation of excerpts, and the samples include stretches of discourse beyond the limits of the propositions that help contextualise meanings.

A different issue is that of the coding of the samples: the identification of functional units may not be transparent. The meaning values of functions may be implicit or lurking in lexical chunks. For the study, we only selected propositions that represented functions explicitly, to wit, those instances that included a lexical stem which coincided with the function at hand. The causal instance includes ‘because’, the definition instance, ‘define’. Other examples include synonyms of the function in question: characterise or represent for descriptions; type as a synonym of class for classification, etc. For other examples, explicitness in function representation was achieved because the proposition followed a typical rhetorical pattern of the function at hand. The definitions incorporated an explicit definiens plus definiendum sequence; explorations included the function for hypothesising featuring a protasis introduced by a hypothetical if; for report, the occurrence of temporal discourse markers (before, after) was regarded as an explicit indication of the said function.

What is implied by this is that the propositions representing the functions denote: (a) clear semantic content of a functional kind; and (b) exhibit full informational, historical content. For each of the discourse functions, we provide excerpts from the selected corpus which satisfy these two conditions: proposition-length and explicitness of functional values.

3. Results

The results are presented on the basis of the cognitive academic functions discussed in Dalton-Puffer (2013); classify, define, describe, evaluate, explain, explore and report. The findings illustrate the meaning potential of the said functions of bilingual students. The tables show the examples as they appear in the narratives with solecisms, mistakes, or language or conceptual errors. Only minor morphological corrections were made, such as concordance mismatches or other inflective errors. Inconsistencies at syntactic (anacoluthons and run-on sentences) and lexical (neologisms or invented words) levels were kept. All of the categories in the taxonomy of cognitive discourse functions will now be discussed individually.

3.1. Classify

Historical narratives often incorporate classifications as a means of matching, comparing and contrasting different data sets. In Table 1, the sample features a contrast between limited partnerships and anonymous partnerships. This difference in partnership organisation (the sentence then indicates) is a result of capitalistic structures; so the proposition incorporates two discourse functions in the same sentence: causation and categorization. The amalgamation of two functions within the same language unit is not an uncommon feature in more advanced narratives, a factor which causes some sort of functional stress normally expressed with complex syntax. As regards the arrangement of the information, it corresponds to that of mainstream classifications: a superordinate concept – capitalism – branches out into two smaller categories. For the sake of coding, the actual use of the lexeme type, a synonym of class, confirms the student’s attempts at classification or typification.

Another feature in the sample is the appearance of nominalizations, noun phrases with complex postmodifications (the two relative clauses, for example, starting with ‘companies in which...’). As is usually the case in advanced literacy, the prose in the sample is more nominal and less verbal, that is, it includes more nouns and lexis and fewer verbs and functional grammar elements. The increase in lexical words may reach saturation points: without functional words, the existing words have implicit grammatical relations that readers have to discover. This unpacking of phrase components tests their comprehension skills. At lower competence levels, nominal abstraction is less common. However, in the sample the student undertook the construction of a very

<table>
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<th>Table 1</th>
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<tr>
<td>Cognitive discourse function: classify.</td>
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<td>Capitalism produced two types of business: limited partnerships – there are companies in which the owners are the people who put all the money, and who keep all the profit – and anonymous partnerships, companies which are separated into stocks; people can buy stocks to help the company and profit from it.</td>
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Table 2
Cognitive discourse function: define.

2a. The avant-garde can be defined as a movement where the typical rules of art were broken – painting, architecture, cinema, music – which appeared in the beginning of the XX century. They were born due to the rising desire of expressing their own vision the world

2b. New farm machines were invented and new tools were used. Some people also made inventions to work easier and faster. One of the most important invention was the seed drill invented by Jethro Tull in 1701 which was a mechanical seeder which distributed seeds directly across a plot of land. This was important because it reduced the workers’ work.

2c. In 1870, a new transformation occurred in the industry: the Second Industrial Revolution. It began in United States and Germany and resulted in many technical changes and in work organisation.

Table 3
Cognitive discourse function: describe.

3a. Futurism is characterised by movement and speed.

3b. People’s bodies were undetailed, their faces were difuminated, the landscape took less importance.

3c. Another topic is dynamism, the representation of movement (as in cubism or futurism) or the complete loss of sense, the liberation of your mind (Dadaism) or the expressionist music, which is absolutely free.

Table 4
Cognitive discourse function: evaluate.

I personally think that those different artistic movements are not as good as Renaissance or Baroque because I prefer a realistic picture rather than a picture that does not represent the world as it is. I actually know that representing speed or movement in a picture is extremely difficult but what I like the most is realistic representation of nature.

The description of paintings in the sample is rather advanced and avoids personifications. The characters in the paintings described are not individuals but figures representing this artistic approach to the pictorial representation of humans. Technical features verging on artistic terminology like difuminated (a neologism due to L1 transfer; blurred is meant) and undetailed are used to describe paintings. As in the definition category above, the exact verb of discourse is used: characterised. This implies a full awareness of the discourse functions the student is engaged in. The statement merely consists of abstract nouns (other than the preposition and linker): futurism, characterise, speed and movement. This trend towards abstraction is further emphasised in the third sample (3c) (loss of sense, liberation, expressionism, etc.) Here, better than anywhere else in the corpus, we can see that maturation in historical discourse hints at an evolution from narration to exposition.

These examples are also two different indicators of reasonable levels of historical literacy. In 3a, advanced language competence is displayed with the appropriate use of academic concision. The resulting proposition is brief and to the point. However, 3c presents a longer language unit, as long as the historical content demands it to be. From a syntactic perspective, this proposition includes two compound noun phrases: representation of movement and loss of sense. Both of them have embedded appositions. The end result is an extremely long sentence. In general, the samples hint that at this level authors can move back and forth combining units of distinctive length to make the narrative flow. This can only be confirmed if we look at the full narratives, and not only the propositions.

Table 2
Cognitive discourse function: define.

3.2. Define

Definitions consist of two major components: the definiendum – the characterisation of the term – and the definiens. The instances in the sample all present the definiens. The avant-gardes (2a), the seed drill (2b) and the Industrial Revolution (2c) are presented in turn. A copula is also present in the immediacy of the definiens, although the equation that the copula implies in 2a and 2b (the avant-garde is an artistic movement; the seed drill is a machine) takes a different shape in 2c, a colon instead of a copula to imply equation (the Second Industrial Revolution: a transformation). Furthermore, the form of the definitions in the sample is what functional linguistics would call incongruent. It does not follow the logical sequence definiendum + be + definiens but upturns the typical theme–rHEME order and arranges the components in reverse: ‘a new transformation occurred in the industry: the Second Industrial Revolution.’ (Table 2).

The presence of a definiens and a copula facilitates the coding of the sample as a definition. Also, there seems to be a deep awareness of the discourse function performed and an explicit reference to the fact that the historical concept (a 20th century art movement) can be defined as, something that we interpret here as a deeper metalinguistic awareness indicative of more competent learners.

As opposed to earlier stages in narrative composition when historical events are framed in relation to personal interventions of historical personages – primitive accounts of national histories tend to foreground the role of characters as in cosmologies – the samples in the table are less personal and more process-oriented. It underscores the functional uses of the machine (the seed drill) and the actions are presented in an impersonal manner, namely, passivization prevails. In fact, when an actor does indeed appear, he plays the role of a passive agent at the end of the sentence (invented by Jethro Tull). The accent is put on the historical process.

3.3. Describe

Descriptions may be of different types: the features of the object described can be external (the narrator is an observer in this case) or internal (the description of functions–the role of an institution or the purpose of a device). So far as the functional categorization goes, all the samples meet the established coding requisite, that the function be made explicit. The words which allow for the characterisation of the samples as descriptions are characterise, detail, and represent; all of which are in meaning and fulfill the same function of providing information on observable features. See Table 3.

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The description of paintings in the sample is rather advanced and avoids personifications. The characters in the paintings described are not individuals but figures representing this artistic approach to the pictorial representation of humans. Technical features verging on artistic terminology like difuminated (a neologism due to L1 transfer; blurred is meant) and undetailed are used to describe paintings. As in the definition category above, the exact verb of discourse is used: characterised. This implies a full awareness of the discourse functions the student is engaged in. The statement merely consists of abstract nouns (other than the preposition and linker): futurism, characterise, speed and movement. This trend towards abstraction is further emphasised in the third sample (3c) (loss of sense, liberation, expressionism, etc.) Here, better than anywhere else in the corpus, we can see that maturation in historical discourse hints at an evolution from narration to exposition.

These examples are also two different indicators of reasonable levels of historical literacy. In 3a, advanced language competence is displayed with the appropriate use of academic concision. The resulting proposition is brief and to the point. However, 3c presents a longer language unit, as long as the historical content demands it to be. From a syntactic perspective, this proposition includes two compound noun phrases: representation of movement and loss of sense. Both of them have embedded appositions. The end result is an extremely long sentence. In general, the samples hint that at this level authors can move back and forth combining units of distinctive length to make the narrative flow. This can only be confirmed if we look at the full narratives, and not only the propositions.

3.4. Evaluate

Evaluation represents the endpoint in historical discourse maturation. This cognitive discursive function entails the critical analysis of facts and a subsequent personal take on the events being described. Stancetaking – the scholarly label for this academic skill – denotes active engagement in judgement and analysis and the full development of a voice. Martin and White (2005) have theorised on the development of an appraisal system, which appears at high competence levels. In short, this system denotes the teller’s growing competence to develop an attitude towards, or even make a moral judgement about, historical events. Of the three major stages in historical discourse – narration, causation and stancetaking – the latter is more cognitively and linguistically demanding.

Examples of evaluation or stancetaking are uncommon in the less competent narratives or, at the very best, accomplished with unsubstantiated opinions and without any real analysis or perhaps understanding of its purpose and effect. At higher competence levels, this may be different. The sample in Table 4 incorporates a well-reasoned critique of Baroque and Renaissance as styles rendering the world realistically. However, the personal appreciation

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for the art movement is not based on academic grounds, but on whim and personal taste. It is still a far cry from a heteroglossic critique, where different sources are considered and an informed personal stance is taken, both typical structures of well-formed historical evaluations. The excerpt comes across as a subjective impression with overt verbs expressing personal assessment (prefer, like) or opinion adjectives (difficult). All in all, the instance presents an overly biased assessment. One should remember that a feature of mature historical narratives is to try to pass off opinions as fact, or at least to provide solid arguments with which to persuade the reader. It is also notable that, once again, the verb of diction representing the function is made explicit. At times, expressions with the word opinion appear at both competence levels, a feature that denotes a metalinguistic awareness of the mental processes involved in discourse. This might also suggest a discourse signpost to guide the reader; a discourse marker of attitude.

3.5. Explain

Explanation is an overarching discourse function which entails causal relations between events and ensuing consequences. If a distinctive historical syntax exists, as content experts claim, this consists mainly of the structure of causes and effects, of conclusions and deductions. These language structures produce the domino effect that shapes history: a sequence of events with causal linkages in between. Coffin (2009) holds that more mature students take a different approach to historical explanation: they shift their narrative organisation from chronological time to textual time. In other words, causes are not organised along an external temporal thread. Rather mature narratives constitute a presentation of entangled events caused by internal dynamics, which authors not only record but also explain. The resulting effect over time is that narratives look less like a plain timeline as students mature and become more literate.

The expression of causality may be very taxing as students often incorporate different layers of past time and have to move back and forth to present a clear sequence of events (backshift). At times it also implies a shift in the narrative from the indicative to the subjunctive mode. This tends to lead to a complex subordinate structure, and if improperly uttered, the resulting proposition is a run-on sentence deviating from standard academic syntax. At earlier stages, students unable to knit together actions at different moments produce a sort of discourse babbling, namely, they get engaged in discourse plans which they are then unable to sustain. The sample in question as appears in Table 5, however, is a very mature instance: it centres on the causes behind the migration from the countryside to urban settings in 19th century Europe and the reasons for immigrant discontent. The paragraph consisting of three propositions becomes an in-depth analysis of fulfilled or unfulfilled group expectations and social goals. The expression of causation is not totally overt and complex nominalizations crop up: ‘problems of hygiene and sanitation.’ The paragraph also achieves high levels of cohesion with well-constructed endophoric references: cohesive nouns (aspects, problems), lexical chains (sanitation, disease, cholera, typhus), conjunctions (so, because), and a well-knit reference system of pro-forms. Moreover, the selected excerpt features causes and consequences and descriptions – of housing, of working conditions – of urban 19th century life. Once again, a short textual chunk incorporates multiple cognitive-discourse functions which we have called functional stress. This implies the student’s ability not only to convey functional meanings, but also to combine them for academic analysis.

3.6. Explore

Of all major discourse functions, exploration is the least frequently used approach in history. A major mode in scientific discourse, explorations present hypotheses which may or may not be confirmed. It is true that ‘all history is full of implicit or explicit counterfactuals, ranging from speculations about alternative outcomes to more specific might-have-beens’ (Hobsbawm, 1997:150). However, historians tend to disregard speculative conditions as a proper approach to the past. One may wonder how the past might have had the course of events been different, but that is not real history-making. Therefore, future predictions are rare in historical discourse, which may be why conditionals are almost absent in the corpus. The sample in the Table 6 is almost unique in this sense.

It is a well-formed conditional sentence introduced by if and followed by a protasis, or condition clause. The functional value of the condition is rhetorical, though. With this device, the narrative intends to transport readers back in time and place them in the role of witnesses of the past. It is not a real condition, since it recreates an impossible situation. Although the stylistic effect is of a doubtful academicism, this incongruent use of conditionals results in an elaborated trait which implies a mature narrator.

3.7. Report

Reporting is the historical function par excellence and recalls the original meaning of history as the past witnessed. The textual form of reporting is the narrative, a genre which humans use from their infancy. Narratives however evolve over time, beginning with reports with a basic narrative structure (bedtime stories) before developing into a more mature approach to the past (historical academic genres). Students’ narratives change dramatically over time. At early ages, stories intend to have a dramatic effect: narratives tend to be accounts where individual deeds are highlighted and follow a neat dramatic structure with an exposition, a climax and denouement. Later on, they tend to be less neatly structured and are constructed on the basis of a sequence of steps working up to a turning point (imbalance). Thus, they come close to the core element of a narrative: a stable situation that some force will perturb (Adam, 2011). The sample in Table 7 illustrates narratives that are abstract. No real characters are presented, but it is the flow...
of artistic movements enhanced with mechanical inventions (the camera) that triggers the imbalance and becomes a watershed in the dynamism of history, art history in this case.

Although the historical topics covered in the sample do not involve real actions, they also require the introduction of different time signposts by temporal linkers like before and after – that is, a sequence of facts unfolding in time. As in all other examples, the proposition displays a considerable development in all the embedded language units: phrases, clauses and the resulting sentence.

4. Discussion

This paper has addressed two questions, dealing in turn with the occurrence of CDFs in historical narratives (the which question, Q1) and the language form that the CDFs take (the how question, Q2), on which the corpus analysis cast new light to some degree. Now, each of these questions will be reviewed in the same order.

The first question, as to whether all the CDFs were represented or not, was aimed to detect possible shadow zones in the expression of discourse functions by L2 learners, that is, if students have the means to convey some historical functions like stancetaking. We have seen that all CDFs are present in the corpus, all or which can be expressed at different levels of complexity. If, for instance, students do not hypothesise, the reason is not that they lack the linguistic tools to do so – conditionals are among the first subordinate clause types in the natural acquisition order – but because it is a function alien to historical discourse. That said, the study timescale leaves us in the dark regarding higher competence levels after mid-adolescence. At the age of 17 or 18 (older than the study population here), new historical meanings are streamlined until students develop a full-fledged personal voice in historical discourse. On the strength of the data presented in this paper, our only claim is to have exemplified the existence of independent and advanced users, although, in our view, this is still a far cry from illustrating the proficient use of a second language (CEFR levels C1, for instance).

By extension, this research question offers some insights into historical literacy at large and reveals that students have passed the early stages in historical reasoning identified in the literature: presentism, concrete understanding of abstract notions, personalist causal explanations, static representation of the past, etc. This not only has consequences for functional taxonomies, such as those of the Council of Europe which we will discuss below, but also points to the feasibility of attaining advanced historical content through an L2. A recent large-scale study on bilingual history CLIL courses (Dallinger, Jonkmann, Hollin, & Piege, 2016) has revealed that historical knowledge reaches a similar level when taught in an L2 or L1. The results demonstrate similar gains in the acquisition of historical microskills and factual historical data (dates, names, etc.) Even though the study reports that the bilingual strand dedicated some extra hours to the subject, the data ‘indicated comparable levels of historical knowledge for the three student groups with minor disadvantages for the non-CLIL classrooms’ (Dallinger et al., 2016:23–31). The data in our study may offer further evidence of a linguistic type supporting this finding. At this school level, historical data in our corpus is intertwined with language across all the possible functions.

Regarding the second question about the integration of content and language, the data reveal how historical content is rendered and the language resources which students deploy for this task. By and large, the sophistication of the historical discourse in the samples seems clear. Students at this level have developed a historical voice; an intellectual approach to the past stemming from both a cognitive maturation and a better grasp of the second language. At this stage, academic language turns out to be more congruent (exhibiting more uncommon sense in the order of sentence constituents, appearing more unnatural, as is usually the case when metaphorical grammar surfaces and theme–rhemé patterns are less frequent) and more synoptic (more expository and less narrative, more prone to nominalisations than to the occurrence of verbal processes) (Ortega, 2003; Christie, 2012). Also, the results show that historical literacy correlates with historical syntax. It is not only that at this level students broaden their verbal tense repertoire or use syntactic devices to express sophisticated historical meanings like internal causation. Furthermore, there is a clear increase in the length of language units at higher competence levels, above all at a phrasal level, as existing quantitative research has already revealed. Nominalisation exemplifies phrasal complexity at its best and this resource provides the narrative with the abstraction and objectivity demanded by mature historical discourse. Another aspect that the second question touched on is that the historical meanings (causation, result, agentivity) are less dependent on grammatical resources and become more lexical over time. As a way of example, if a historical character is mentioned as being guilty, this implies that he or she was responsible for the events being depicted. No further grammatical information, such as a causal subordinate sentence with because, for example, is needed. The resulting propositions are more tightly knit, containing more information and multiple discourse functions coalescing in the same language unit. All things considered, the data has allowed us to discuss advanced language functions, such as functional stress, lexical saturation, asyndetism, and a metalinguistic awareness of discourse functions, as well as a mature rendering of CDFs: process-oriented causation, heteroglossic stance-taking, backshifting, etc. These features will hopefully help to characterise future studies on advanced historical skills. Table 8 features some major advanced discourse competences discussed.

As stated, the results have some bearing with the functional taxonomies now intended in some institutional quarters like the Council of Europe under the label Languages of Schooling. As anybody acquainted with the CEFR knows, the precise language and content benchmarking goes beyond the scope of a paper and requires further institutional planning to map out the language levels in content literacy. Integrated content and language descriptors are necessary in multilingual education for the simple reason that official curriculums, the integrated assessment of content and language, and language across curriculum planning need to take into account a proper map of language progress over time.

So far, what had been provided was a rough list of competence descriptors of historical communication or historical literacy which needed to be confirmed with empirical corpus-based data (Council of Europe, 2015). From the findings described here, we can see that students’ narratives match, at least partially, some advanced descriptors. The corpus contains instances which prove that they can structure the information on a particular event or situation as a sequence and contextualise the information by relating it to the information already available about the period. Nevertheless, other advanced descriptors are missing from the corpus, an indication that there are still higher levels to be discovered. For instance, students hardly ever ‘introduce multiperspectivity into historical research and narration’ (Beacco, 2010:12). Nor do they express bias in a covert manner: their personal opinion comes across very clearly and the facts reported are, at times, fraught with subjectivism. All in all, nonetheless, we can see literate students producing elaborate discourses in the examples from the corpus.

In any case, this study has limitations that we would like to acknowledge. Although the historical literacy levels in the corpus may be considered satisfactory, we cannot affirm that this is happening across-the-board. Competence levels may vary and some individuals may not progress at the same pace. Bilingual models
Table 8
Cognitive discourse competencies for advanced historical thinking.

<table>
<thead>
<tr>
<th>Classify</th>
<th>Functional stress: students can use complex syntax to coalesce multiple functions in one proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define</td>
<td>Incongruent structures: students can distort the logical order of constituents for style effects or textual cohesion</td>
</tr>
<tr>
<td></td>
<td>Process-oriented accounts: students can use impersonal structures to produce process-oriented accounts and avoid personalisms in the narration of the past</td>
</tr>
<tr>
<td>Describe</td>
<td>Sorting: students can identify and consider multiple sources of information and express acknowledgement to others</td>
</tr>
<tr>
<td></td>
<td>Contextualization: students can set the events within appropriate spatial and temporal limits</td>
</tr>
<tr>
<td></td>
<td>Lexical diversity: students can provide precise descriptions with diverse lexical words and terminology</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Corroboration: students can contrast the views of others against new facts.</td>
</tr>
<tr>
<td></td>
<td>Stancetaking: students can judge and take an ideological stance on the past</td>
</tr>
<tr>
<td></td>
<td>Epistemic stance: students can express judgement devoid of dualistic thinking and stereotyping</td>
</tr>
<tr>
<td></td>
<td>Heteroglossic critique: students can consider different sources before taking an informed personal stance</td>
</tr>
<tr>
<td>Explain</td>
<td>Multifactorial causality: students can relate a number of causes which culminate in a multisided account of events</td>
</tr>
<tr>
<td></td>
<td>Abstract causation: students can use nominalizations to foreground the abstract causes of historical processes</td>
</tr>
<tr>
<td></td>
<td>Asyndetic causation: students can express causation with lexical means instead of overt causal connectors.</td>
</tr>
<tr>
<td>Explore</td>
<td>Authoritative voice: students shift from exophoric reference (he) towards a combined use of external and internal references (they and the author).</td>
</tr>
<tr>
<td></td>
<td>Counterfactuality: students can speculate about alternate scenarios different from the actual course of events.</td>
</tr>
<tr>
<td>Report</td>
<td>Backshifting: students can move back and forth in time and connect asynchronous past events.</td>
</tr>
<tr>
<td></td>
<td>Textual time: students can shift their narrative organisation from chronological time to textual time, i.e. causes are not organised along an external temporal thread.</td>
</tr>
</tbody>
</table>

progress in bilingual settings which trace individual progress over time and which in doing so offers the full evolution of historical literacy at work.

Acknowledgement
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References

have high dropout rates and students may feel unable to function with non-majority languages as a vehicle of school content. We encourage further studies on how individuals progress in this element over the years. These longitudinal insights, along with the CEFR benchmarking of the L2 historical corpus, will help paint the full picture of languages of schooling, now a major research endeavour by any standard.

5. Conclusions
Cognitive discourse functions have proven to be a relevant tool for exploring academic language in contact with content areas. For those seeking a comprehensive but also manageable taxonomy to conduct research on language across the disciplines, Dalton-Puffer’s classification is an accurate lens through which to examine classroom discourse and literacy studies. As most education systems have taken a multilingual turn, certainly in Europe, all of the stakeholders need to refine assessment and planning tools, since we need to know we are on firm ground in the venture of multilingualism. With the limitations acknowledged, this paper intends to offer an empirical approach to the matter and to signpost the terrain of historical communication.

The results show that the use of a non-majority language as a vehicle for content teaching in the particular situation of European education, and also in similar additive bilingual systems worldwide, facilitates the acquisition of advanced historical functions and knowledge as represented by CDFs. This is not to say that this will happen across-the-board, in all situations, or for all individuals. These results should also encourage future research on language
issues in social studies research for the 21st century. Greenwich, CT: Information Age Publishing.


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