Discourse analysis of statements of purpose: Connecting academic and professional genres

Carmen López-Ferrero
Universitat Pompeu Fabra, Spain

Carme Bach
Universitat Pompeu Fabra, Spain

Abstract
As a discourse genre, statements of purpose are characterized by their occluded status in the academy and by their hybrid nature. Statements of purpose are required in applications for a place in a postgraduate course (Master’s degree or doctorate), and they are requested to obtain information about the academic and professional background and skills of each applicant. A study of the genre’s linguistic and textual features is needed in Spanish to discover and understand writers’ and readers’ perception of this genre. A corpus of 50 motivation letters in Spanish is analyzed here. We study the distinguishing macro- and microtextual features of this particular genre and co-occurrences between both kinds of features. At the macrotextual level, statements of purpose display prototypical rhetorical moves, which can be classified as writers’ moves and readers’ moves. On the microtextual level, modalization resources and discourse markers are discussed. This multiple perspectives analysis of the corpus shows evidence of significant co-occurrences among modalization, discourse markers, and rhetorical moves. Writers’ ideal representations of this discourse genre, which spans the academic and professional fields, can also be deduced.

Keywords
Academic discourse, discourse analysis, genre analysis of moves, occluded genres, professional genres, Spanish language, statement of purpose

Corresponding author:
Carmen López-Ferrero. Department of Translation and Language Sciences, Universitat Pompeu Fabra, Campus de la Comunicació-Poblenou, despatx 53.602, C/ Roc Boronat, 138, 08018 Barcelona, Spain.
Email: carmen.lopez@upf.edu
Introduction

The object of study of this article is the motivation letter (‘carta de motivación’ in Spanish, known as ‘statement of purpose’ or ‘personal statement’ (PS) in United States). Letters as a discourse genre have been analyzed in different settings and for different purposes: for product and self-promotion in business settings (Bhatia, 1993), as job applications (Gillaerts, 2003), as personal argumentative texts in newspapers (Burguera, 2006; Ciapuscio, 2010; Garrido, 2005), and as presentation or submission letters (Montolio and López, 2010; Swales, 1996). However, motivation letters in Spanish have not been studied sufficiently. Their special status as an occluded genre in the academy makes them difficult to categorize and describe.

There are plenty of recommendations (‘how to’ literature; Newman, 2004) to be found online (in both English and Spanish) aimed at helping people to write a good motivation letter, along with samples. The advice given on these web sites is not pragmatic or discursive but primarily structural (parts of the letter, format) and informative (content) in nature; it is focused on the product and not on the process. Apart from these brief general guidelines, there is no systematic or detailed linguistic or textual description of a standard Spanish motivation letter or of its rhetorical process. In the survey of print and electronic resources for writing the statements for graduate programs made by Samraj and Monk (2008), they conclude the information given doesn’t differentiate between PhD and Master’s programs, and across disciplines. This study also reveals the focus on a list of ‘Do’s and ‘Do not’s for writing a statement of purpose. Swales and Feak (2011) give examples of statements of purpose for English graduate school applications and offer a variety of tasks to show students how their texts may be perceived in order to feel more ‘genre ready’. In this line of preparing for the genre in Spanish, the questions we aim to answer in our study are the following:

1. What are the most characteristic macrotextual features in the discourse genre of motivation letters in Spanish?
2. What are the prototypical microlinguistic characteristics?
3. What correlations can we establish between the macro- and micro-features identified?
4. From the identified features, what kind of genre is the Spanish motivation letter: an academic or a professional genre?

To answer these questions, in the first section we define our object of study (motivation letters) and the discourse genre framework of our analysis. We then describe our corpus and the methodology and categories of analysis. Following this we present the results of the study and discuss them, as well as propose explanations: our data are both quantitative and qualitative at both the macrotextual and microlinguistic levels of analysis. Finally, in the conclusions section we highlight the more relevant applied linguistics contributions of our study and subsequent future lines of research.
Theoretical framework: Motivation letters as an occluded genre

Motivation letters, also called PS (Barton et al., 2004; Bekins et al., 2004; Ding, 2007) or statement of purpose (Brown, 2004; Samraj and Monk, 2008) in US discourse tradition, are written as a requirement imposed by an academic institution to which the writer is trying to gain admission. Their aim – as the noun motivation suggests – is to show the writer’s aspirations to become a good professional in a specific field or to improve his or her job prospects. The ultimate goal of a motivation letter is to persuade its reader of the writer’s suitability as a candidate for a place on the course, given the qualifications the candidate expounds in his or her text.

These types of letters can be defined as occluded or semi-occluded (Samraj and Monk, 2008) written genres in the academy. Swales (1996) defines occluded genres in the academy as follows:

On the one hand, they are typically formal documents which remain on file; on the other, they are rarely part of the public record. They are written for specific individual or small-group audiences, and yet may also be seriously invested with demonstrated scholarship and seriously concerned with representing their authors in a favourable professional light. More importantly, however, exemplars of these genres are typically hidden, ‘out of sight’ or ‘occluded’ from the public gaze by a veil of confidentiality.

One consequence of these characteristics is that newcomers to a field, such as graduate students or junior staff, may have particular difficulties in matching the expectations of their targeted audiences. (p. 46)

Occluded discourse genres are written by people serving as references, by academic committees, or by students (as in our case); some examples of occluded genres listed in Swales (1996) are request letters (for information, copies of papers, advice, etc.), application letters (for jobs, grants, etc.), submission letters (accompanying articles, etc.), research proposals (for outside funding, etc.), article reviews (as part of a review process), or external evaluations (for academic institutions). We add motivation letters (for postgraduate studies) to this list of items drawn from Swales.

There are, of course, previous discourse studies on other types of letters. For Spanish letters, Ciapuscio (2010) has carried out an analysis of politeness and illocutionary structure in letters by science readers, highlighting the hybrid nature of this genre, which combines traits of journalistic texts (letters to the editor is one of the opinion pieces of a periodical) and literary texts (the epistolary is a genre with a long tradition).

Research on motivation letters developed in the United States points out the genre’s instability in different discourse communities. Bekins et al. (2004) analyze PS in medical school applications standing out their unusual status: it is a genre not practiced by central members of a discipline but rather by disciplinary apprentices. The ‘marketization’ character of this kind of genre is pointed out as it involves the promotion of oneself through discourse:

The PS in medical school applications is a common and important genre that plays a significant role in determining which students are selected for admittance into medical schools. The
primary purpose of the PS is to highlight the personal qualities and achievements that grades, recommendation letters, and MCAT scores do not reveal. (Bekins et al., 2004: 57)

In a few previous research works, different features have been found in motivation letters written for different programs: medical schools (Bekins et al., 2004), medical residency programs (Barton et al., 2004), clinical psychology programs (Brown, 2004), linguistics, electrical engineering, and business administration Master’s programs (Samraj and Monk, 2008). The results in Samraj and Monk’s (2008) study of 35 statement of purpose (12 of linguistics, 9 of electrical engineering, and 14 of business administration programs) indicate the need for deeper research in this field:

Although there are broad similarities in the organization of this genre across these disciplines, there are intriguing differences, adding to our current knowledge of disciplinary variation in academic writing. Our findings also indicate that this genre can still be deemed occluded to a certain degree, for although some information exists on the general structure of graduate school statements of purpose, there is little specific information that is relevant for the writing of statements for specific master’s programs. (p. 195)

Multidimensional linguistic analysis (Van Dijk, 2000) has emphasized text structure and the rhetorical moves which characterize each discourse genre. A move is a particular textual segment meant to achieve a purpose, following Swales’ (1990) work on academic articles. In the case of product and self-promotion letters, a genre which shares the ‘persuasiveness’ aim with motivation letters, Bhatia (1993) has distinguished the following seven moves:

(a) establishing credentials
(b) introducing candidatures
(c) offering incentives
(d) enclosing documents
(e) soliciting response
(f) using pressure tactics
(g) ending politely

Specific studies on PS or statement of purpose in the United States detailed different rhetorical moves. Bekins et al. (2004: 61) constructed a tentative set of five rhetorical moves to hold a two-day workshop to help students to prepare a PS for medical, dental, pharmacy, or veterinary school:

1. **Hook**: A narrative account designed to grab the reader’s attention by stating a unique characteristic or experience of an applicant.
2. **Program**: The reason applicant states for choosing a profession/specialization.
3. **Background**: Critical evaluation of skills and/or milestones in learning.
4. **Self-promotion**: Discussion of an individual’s distinctive qualities as a rationale for candidacy.
5. **Projection**: Evidence of critical judgment and/or understanding of the career choice.
As for Samraj and Monk (2008: 200–201), they identify in the 35 statements of purpose of their corpus the following five moves, with only moves 2 and 3, background and reasons for applying, appearing in all the texts, the others being optional:

1. Introduction, with three steps
   - Generalization
   - Background
   - Goals or decision to apply
2. Background, with five steps
   - General (family/travel, etc.)
   - Work
   - Education
   - Research
   - Personal attributes
3. Reasons for applying, with four steps
   - Gap in background
   - Positive gains (incl. interests)
   - Program/university attributes
   - Disciplinary and research reasons
4. Extra-curricular activities
5. Conclusion, with two steps
   - Goals and/or prediction of future
   - Self evaluation

These studies focus on the process and also on the contrast between the personal (individual introspection and reflection) features and the academic or the professional specialization of the statements of purpose. Different from them, we are interested in the discourse and linguistic features that connect the academic and the professional nature of the genre. For this reason, the macrotextual point of departure for our analysis is Bhatia’s seven-move model for application letters, which we have adapted to fit the features of the genre under study. We also consider the rhetorical structure and the use of metadiscursive elements for persuasiveness that Gillaerts (2003) has studied in job applications. Motivation letters are part of an application for Master’s-level education leading to a diploma, so persuasion is a defining pragmatic goal of this discourse genre. The microtextual features we analyze in our study, then, are due to the persuasive–argumentative component of motivation letters, in the framework of the rhetorical genre studies and systemic functional approaches to discourse genres (Halliday, 1994; Hasan et al., 2005; Martin and Rose, 2007 [2003], 2008), as well as research in academic discourse genres (Bhatia, 2004; Hyland, 2007).

Corpus

The corpus of our analysis consists of 50 motivation letters written by students selected – from a total of 140 candidates – to enter a single Master’s program (MA) in Teacher Training for Spanish as a Foreign Language over a period of two academic years:
2010–2011 and 2011–2012 at two Catalan universities. The total word count in the corpus is 20,618: the average word count for each letter is 412.

The criterion we followed to select the letters was that their authors were eventually selected for the MA program, which means that the writers are probably communicatively competent in Spanish. Although the selected candidates come from all over the world, they have Spanish as their first language (L1); they must demonstrate a Mastery or an Effective Operational Proficiency competence in any case. So, it should be fair to assume that most of the features of the analyzed motivation letters display genre-characteristic trends because their authors (the candidates for the MA) have demonstrated their competence as writers in Spanish. Apart from this language skill, the fact that the applicants of the corpus letters were selected for the MA program means that the reasons they argue in their text were credible and convincing statements for the admissions committee; the successful nature of the texts of the corpus has also been a requirement in previous research (cf. Samraj and Monk, 2008). To sum up, two criteria were applied in order to choose the corpus: a more substantive one, that is, the effective and persuasive statements of the letters, and a linguistic one, the Spanish competence of the writers.

The specific audience of these motivation letters are the two coordinators of the MA: one associate professor from each of the two Catalan universities involved. The only indication given in the MA’s pre-enrollment procedure instructions is that candidates must submit a ‘personal motivation letter’, with no further information regarding the letter’s addressee. Applicants didn’t receive any instructions about writing the motivation letter.

**Methodology: Categories of analysis and tool**

Following Bhatia (1993, 2004), we can establish 10 moves for motivation letters the general academic discourse community would accept as prototypical. This does not mean that they are all necessarily present in every letter, but that they are all the possible different moves in motivation letters:

(a) establishing credentials (personal parameters: writer’s name)
(b) entitling the letter
(c) referring situational parameters (place and time)
(d) greeting the reader
(e) persuading the reader
(f) introducing the applicant and the letter’s objectives
(g) reasons for applying
(h) expressing future expectations
(i) ending politely
(j) letter closing and signature

Decisions about the classification of the moves are made on the basis of linguistic evidence (lexical cues) and comprehension of the text, given that ‘moves are semantic and functional units of texts, which can be identified because of their communicative purposes and linguistic boundaries’ (Ding, 2007: 370).
In our analysis of motivation letters, we have not considered the first three moves – (a) *establishing credentials*, (b) *entitling the letter*, and (c) *referring situational parameters* – because they are paratextual, not actually part of the discursive material but rather situational parameters that identify the text as belonging to the epistolary type. These three moves are inherent to all types of letters (e.g. all the letters in Figure 1), and therefore are not specific to the genre we are characterizing.

In Figure 2, we describe and exemplify the moves we are going to study in the corpus (seven in total), which are the macrotextual dimension categories in our analysis, focusing on the communication participant prominent in each of them, the writer (W) or the reader (R).

By grouping the moves at the macro-level analysis as W moves and R moves, we connect them with the microlinguistic resources; we emphasize two types of lexicogrammatical items given the persuasive–argumentative component of the genre: *modalization* resources and *discourse markers* (DMs).

For *modalization* features, we follow Hyland’s (2005) *stance* and *engagement* model of academic interaction. *Stance* and *engagement* are interactional macrofunctions related to the W and R, respectively. *Stance* includes attitudinal features which refer to ‘the ways writers present themselves and convey their judgements, opinions, and commitments’ (Hyland, 2005: 176). *Engagement*, in terms of Hyland (2005),

is an alignment dimension where writers acknowledge and connect to others, recognizing the presence of their readers, pulling them along with their argument, focusing attention, acknowledging their uncertainties, including them as discourse participants and guiding them to interpretations. (p. 176)
| Move | Description of the move | Example (Letter 29) |
|------|-------------------------|---------------------|
| Greeting the reader | A candidate first writes a salutation addressed to the admissions committee, usually very briefly, as a standard item. | *Señores,*  
*Dear Sirs,* |

| Persuading the reader | The writer flatters the addressee as a persuasive strategy to win him/her over. | *Me interesan los contenidos pero también las formas, y la lengua como vehículo de expresión básico en el ser humano. El dominio de una lengua ayuda a entender la realidad y carecer de ello te limita como persona en todos los aspectos de la vida. Por ello creo que es imprescindible para un adulto poseer un correcto uso de la lengua que permita alcanzar la plenitud de mente y espíritu.*  
I am interested in both the content and forms of language, as well as its fundamental role in human expression. Mastery of a language furthers one’s understanding of reality; lack of such mastery is limiting in personal and all other areas of life. Thus, I believe it is essential for an adult to be able to use language correctly, which allows full development of the mind and spirit.  
(…)  
*La correcta transmisión del conocimiento es sin duda uno de los pilares de nuestra sociedad. Además en este mundo globalizado donde las personas disfrutan de una movilidad casi ilimitada, los intercambios lingüísticos se hacen más necesarios que nunca por lo que conocer a fondo un idioma se hace imprescindible.*  
Accurate transmission of knowledge is without a doubt one of the pillars of our society. Furthermore, in today’s global world, where people enjoy nearly limitless mobility, interaction through language is more necessary than ever; thus thorough knowledge of a foreign language is indispensable.(…)  
*Sin más, les adjunto la documentación requerida y les emplazo a que valoren mis razones y me den la oportunidad de explorar más a fondo el mundo de los idiomas, en este caso el español, y pueda trasmitir mis conocimientos a todos aquellos que lo deseen.*  
Without further ado, I enclose all required documents. I urge you to consider the arguments I have given and give me the opportunity to explore the world of language, specifically Spanish, more deeply, and to share that knowledge with all who wish to learn. |
### Introducing the applicant and letter objectives

The applicant states the aim of the letter and explains his/her professional and academic qualifications as he/she believes the letter evaluators should take them into consideration during the selection process, with a view to being accepted.

**Me dirijo a ustedes con el propósito de que tengan en consideración mi candidatura para poder acceder al Máster Oficial de Formación de Profesores de Español como Lengua Extranjera que se inicia el próximo mes de Octubre. La motivación que me conduce a querer realizar dicho curso no es otra que la de conducir definitivamente mi carrera profesional por el camino de la docencia.**

I am writing to request that you consider my candidacy for admission to the Official Master’s in Teaching Spanish as a Foreign Language program, starting next October. The reason behind my desire to do this Master’s is none other than to steer my career definitively towards teaching.

### Reasons for applying

The applicant gives personal motivations and life history that has led him/her to want to enrol in the Master’s degree.

**Tras mi licenciatura en 1993 en Ciencias de la Información por la UAB he desarrollado diferentes trabajos en diversos ámbitos que me han aportado experiencia y madurez laboral. Al mismo tiempo, durante estos años he continuado con mi formación sobre todo en lengua inglesa, obteniendo el título de nivel avanzado de la Escuela Oficial de Idiomas en junio del 2010.**

After completing undergraduate studies in Information Science at the UAB in 1993, I have done a variety of work in various sectors. This has given me experience and professional maturity. During this time, I have also continued my training in languages, especially English, having obtained the advanced-level diploma from the Official School of Languages in June 2010.

**Siempre he sentido especial interés por las lenguas y la comunicación, lo cual pude desarrollar durante mi paso por la facultad, estudiando asignaturas como redacción periodística, en la cual logré una matrícula de honor, o creatividad publicitaria, que te exigen un nivel notable de análisis y síntesis.**

I have always been keenly interested in languages and communication, a passion I was able to develop during my degree studies through coursework in journalistic writing, where I achieved top marks, as well as in creative marketing, which demands considerable analytical and expressive skills.

(Continued)
Expressing future expectations

The applicant uses this move to express his/her hopes to enroll in the course and prosper academically or professionally thanks to what he/she will learn and do in the course.

I believe I will be able to do excellent work as a teacher. Indeed, during my undergraduate studies, I periodically tutored children with learning difficulties, work that I very much enjoyed. Accurate transmission of knowledge is without a doubt one of the pillars of our society. Furthermore, in today’s global world, where people enjoy nearly limitless mobility, interaction through language is more necessary than ever; thus thorough knowledge of a foreign language is indispensable.

Ending politely

The writer ends politely to bring the letter to a close.

Atentamente.

Yours faithfully,

| R | Ending politely | The writer ends politely to bring the letter to a close. |
|---|-----------------|--------------------------------------------------------|
| W | Letter closing and signature | The writer bids farewell and signs the letter. |
These two interactional functions, two sides of the same coin (the interpersonal dimension of discourse), are realized by the linguistic resources, as shown in Figure 3 (Hyland, 2005: 177).

From this model we select six modalization cues which have clear lexical and grammatical cues in our corpus: hedges, boosters, attitude markers, self-mention, reader pronouns, and questions. We have classified them according to the nature of their linguistic signals: predominantly evaluative and epistemic cues in hedges, boosters, and attitude markers; and predominantly grammatical (personal deixis) in self-mention and reader pronouns; as for questions, they are rhetorical features to engage the reader. Nevertheless, we only reflect in the article those linguistic features which have been more significant, as Atlas.ti co-occurrence tool shows (see Figure 6 later): attitude markers, personal deixis (self-mention and reader mention elements), and DMs of structure.

Figure 3. Linguistic resources of interactional macrofunctions.

Modalization cues

Modalization is related to the presence of the author in his or her text, through stance and voice in discourse (Hyland, 2005). Sancho Guinda and Hyland (2012) define these concepts in applied linguistics as follows:

the terms essentially refer to the expression of point of view in speech and writing and to the ways we engage with others. They are central to ways of looking at written texts as social interactions, where readers and writers negotiate meanings, and to how students can be taught to convey their personal attitudes and assessments and appropriately connect with their readers. (p. 1)

Evaluative and epistemic modality cues

1. Attitude markers to express feelings such as surprise or disappointment, and judgments of importance, relevance, and so forth, that go with the writer’s arguments: these include nouns (interés ‘interest’), adjectives (imprescindible ‘essential’, interesante ‘interesting’, prestigiosa ‘prestigious’, especial ‘special’), verbs (deseo ‘wish’, siento ‘feel’, quiero ‘want’), and prepositional clauses (con eficacia ‘with efficacy’) conveying evaluative meaning or the writer’s wishes (desiderative sentence modality).
Personal deixis

2. Self-mention elements which signal how the writer makes self-references in the discourse, including subject and object first-person pronouns; possessive determiners and verb endings: *mi* máxima motivación ‘my greatest motivation’; *carezco* de herramientas ‘I lack the tools’, and so forth.

3. Reader mention elements used by the applicants to reach out to their reader (the coordinators of the Master’s), including personal pronouns and verb endings showing distance or proximity between the communication participants: *me dirijo a* ustedes ‘I address you’; *Le escribo* ‘I write to you’; *no sólo porque el español sea parte vital de nuestra cultura* ‘not only because Spanish is a vital part of our culture’; *que ofrece* su Universidad ‘which your university offers’.

DMs

DMs are linguistic units specialized in linking discourse segments and in guiding interpretation of the text. We use the term DMs of discourse structure first used by Schiffrin (1987) and then by Redeker (1990). We distinguish two types of DMs in the corpus: distributional and argumentative ones, but the more relevant appeared to be the distributional ones (see Figure 6).

**DMs in a distributional function.** Discourse structure DMs organize the various parts of a letter. They are very important cohesive tools because they guide a reader going through a motivation letter by marking its different parts. At the same time, they are important in their argumentative strength to clearly present reasons in this type of letter (En primer lugar ‘In the first place’; Primero de todo ‘First of all’; por una parte ‘on the one hand’; por otro lado ‘on the other hand’, etc.).

Qualitative analysis tool

We used a qualitative analysis tool: Atlas.ti, version 6.2, a licensed software application (Friese, 2014). The letters were fed into the software after creating a hermeneutic unit, which is the file containing all the information related to the qualitative analysis of texts recorded: documents, codes used, analysis, and the relationship between the text segment quotations marked. Having created this analysis unit, the texts were input one by one in rich text format (.rtf). Once the letters had been digitized, the analytical categories were introduced in the software as codes. Since we have established two different types of codes, one corresponding to the macrotextual level of the letters and the other to the microlinguistic level, each one was given a different tag for easy recognition and to make marking and subsequent analysis operational:

- Macrostructure tagging with letters (from *a* to *j*) was used for codes corresponding to the 10 moves identified in the letters.
- Microstructure tags starting with a number were created for each formal lexico-grammatical category: 1 to 6 for evaluative and epistemic modality cues; 7 to 9 for DMs.
As we have detailed in Figure 2, up to four of the considered moves can be connected to rhetorical actions concerning the letter writer (W moves) and three with the addressee (R moves); we list in Figure 5 both groups according to the letter assigned to them for analysis in Atlas.ti.

For identification purposes, each letter was assigned a code in the hermeneutical unit analysis: ct (carta) identified it as a motivation letter and a reference number (1, 2, 3, etc.) for each entry of a letter in the corpus. Thus, ct21 identifies letter 21 within the corpus. Texts were tagged manually, with one or more tags assigned to each text segment. The software enabled us to assign and overlap tags on the same segments: in other words, we could reflect the multifunctionality of the discourse elements. For example, here is a segment from ct3:5:

(1) Expongo a continuación los motivos por los que me gustaría matricularme al master […].
I expound below the reasons why I would like to enrol in the Master’s […]

It was tagged as follows:

1) Macrotextually, the whole segment belongs to the Introducing the applicant and letter objectives move.
2) Microlinguistically, we find the following tags for the same segment, corresponding to two different lexicogrammatical features.

a. **self-mention elements**: *me gustaría* ‘I would like’, *matricularme* ‘to enrol [me]’

b. **hedge**: *me gustaria* *matricularme* ‘I would like to enroll’

c. **attitude marker**: *gustar*, ‘like’

To apply these tags, we have marked units that have a minimum complete textual sense, that is, the microlinguistic units are not tagged alone (only the pronoun *me* in example 2), but they are analyzed as part of the discourse segment in which they are used (*me gustaria matricularme*) in order to easily retrieve what the writer meant to communicate in the letter.

In order to observe the pragmatic function of the lexicogrammatical elements, it was necessary to take into account the context they appear in. The *Atlas.ti* tool was used to extract every discursive sequence marked with the analytical categories as well as to extract frequencies of use for each one.

Finally, we have crossed the macro- and microlinguistic to establish relationships between these two levels. Figure 6 shows the table of co-occurrences found through *Atlas.ti*: the lighter shades show the most outstanding data in relation to lexicogrammatical forms used more frequently in each of the moves as they were defined. In the following section, we explain the results of crossing the two levels of analysis.
Results and discussion

The analysis of the macrotextual features, then, is both qualitative and quantitative (following). In the study of microlinguistic features (see later), it is worth mentioning the co-occurrences found between lexicogrammatical elements and the macrotextual categories analyzed previously.

Macrotextual features

The macrotextual features of our corpus were analyzed according to whether they were oriented toward the writer’s (W) or the reader’s (R) letter. As for the W moves, only in three of the 50 letters (ct34, ct37, and ct45) is the author’s signature missing; of these, two include the farewell (ct34: aprovecho la ocasión para brindarles mis más cordiales saludos ‘I take this opportunity to greet you most cordially’; ct37: saludos cordiales ‘kind regards’). Letter ct45 has no signature and no closing salutation, which is characteristic of this type of letter. Here is how letter ct45 (unique in the corpus) opens and closes:

(2) CARTA DE MOTIVACIÓN

En mis primeros años de escuela, mis profesores solían elogiar mis facultades a la hora de escribir. A menudo, elaboraba redacciones fantásticas y creativas.

[...]

Por todas estas razones solicito ser admitida en el MÁSTER. (ct45)

MOTIVATION LETTER

In my first years at school, my teachers used to praise my writing skills. I would often compose fanciful, creative essays.

[...]

For all of these reasons I request to be admitted to the Master’s.

The absence of any mention of who the writer is or who the letter’s audience is shows that it is conceived more as an academic essay than an epistolary. However, it must comply with the requirement of signaling the writer’s identity with a signature at the bottom, following a standard practice of the letter writing genre, as well as some formulae for letter closing, like Atentamente ‘Yours sincerely’ (ct2), Saludos cordiales ‘Kind regards’ (ct1), or Reciban mis más cordiales saludos ‘Please receive my kind regards’ (ct46). They are routine linguistic formulae, fixed for this rhetorical function: they appear in 84% of the letters analyzed.

All of the moves that make up the body of the text are present: (f) introducing the applicant and letter objectives, (g) reasons for applying, and (h) expressing future expectations; the first, introducing the applicant and letter objectives, is the only one which is missing from 18% of the letters. This data can be explained by the hybrid nature of the genre, which overlaps academic and professional letter writing. Some applicants opt for a more academic approach when they do not include in the first paragraph the subject they are writing about (the so-called subject line in business and professional environments). Here are some examples of this move:
I am writing to you to tell you the reasons why I am applying to enrol in this Master’s.

My name is *** and I hold a degree in *** from the Autonomous University of Madrid. I am contacting you because I wish to enroll in the Master’s […] that your university offers.

This first paragraph of the body of the letter is followed by an explanation of the reasons for applying. The reasons for applying move is the key one that distinguishes the motivation letter from other letters. The aim of this part is to show that the author is an adequate candidate to benefit from one of the places offered in the MA. Noteworthy in this move is the fact that the candidate’s adequacy sometimes depends on academic qualifications and sometimes is based on professional reasons. The following ((5) and (6)) are examples of the academic reasons that are given:

I have always felt a special interest for studying Spanish language and literature, which has grown over the last years of formal education.

Having finished my studies in Philology and History at the University of Komotini (Greece) I am now looking for a better job. Spanish has been a part of my life for the last 4 years, and I still use it all the time, on a daily basis.

The following is an example of professional reasons:

Another reason is that Spanish, for me, has been a professional tool and I have had the luck to be in constant contact with it over the past thirteen years. In all this time, in carrying out my work as an advertising writer, I found the need, as well as the pleasure, to gain a deeper knowledge of the language, which I would like to continue to develop by doing this Master’s.
Other cases that stand out are the ones that state a desire for a professional career change as the main reason for wishing to enroll in the MA program. This can be seen in (8):

(8)  *Soy ingeniero industrial de profesión, la he ejercido por dos años y medio más casi un año de pasantías en una empresa de alimentos muy conocida en Venezuela.* (ct20)

I am an industrial engineer by profession. I have practiced for two and a half years plus almost a year’s internship in a well known food company in Venezuela.

This kind of motivation can be supported by academic and professional reasons:

(9)  *Desde que me he licenciado mi actividad formativa y profesional ha estado enfocada fundamentalmente en dos vertientes […]. Por un lado, en el ámbito de la investigación universitaria, centrada en la oralidad y la entonación; y por otro lado, en el ámbito de la enseñanza del gallego, en el que últimamente estoy más interesada.* (ct30)

Since finishing my degree, my training and work have been basically focused on two areas […]. One is in the field of university research, in spoken language and intonation; the other, in the area of teaching Galician, which I have lately found more interesting.

This move, then, the defining element of a motivation letter, is where the hybrid nature of the genre can be seen most clearly: it is halfway between an academic text and a professional one, as we postulated in the theoretical framework. The following (10) illustrates the same hybridization in the *expressing future expectations* W move:

(10)  *Resumiendo, considero de mucha importancia la realización de este master para mi currículo y futuro profesional porque el mismo me abriría las puertas en el sector de la enseñanza de español como lengua extranjera, sector que ha sufrido en los últimos años un incremento en la demanda de profesionales debido al creciente interés por el conocimiento de nuestra lengua, y que me permitiría encontrar un empleo acorde con mi vocación profesional tanto en España como en el extranjero.* (ct16)

In short, I consider that it is very important for me to do this Master’s, both for my CV and my career, because it would open doors for me as a teacher of Spanish as a foreign language, as demand for professionals has grown in this sector due to a growing interest in knowing our language, and this would help me to find employment in line with my professional vocation both in Spain and abroad.

Given the mixed nature of the genre analyzed in the corpus, very often these two W moves, *reasons for applying* and *expressing future expectations*, are blended and appear in the same paragraph, as in (11), the expression of *expectations* underlined:

(11)  *Como demuestra que mi primera elección de estudio universitario fuese el magisterio de educación primaria, la educación siempre ha sido una vocación que ha despertado mucho interés en mí. Siempre he tenido en mente, también, la posibilidad de trabajar en el extranjero y de desarrollar mi vida laboral fuera de mi país (de ahí la elección de la antropología como estudio de segundo ciclo). […] Esto se acompaña con que, además,
estoy dedicando este año – y el que viene – a perfeccionar mi inglés para la obtención de un certificado oficial que me permita, junto con la obtención de éste [sic] máster, orientar mi futuro a la enseñanza del español en el extranjero. Por ello, estoy dispuesto a trabajar duro para conseguir la mención europea vinculada a este máster. (ct13)

As demonstrated by the fact that my first choice for university studies was primary education training, education has always been a calling that has roused a keen interest in me. I have always borne in mind the possibility of working abroad and developing my professional career in a different country (hence my choice of anthropology as a second-cycle undergraduate degree). […] Furthermore, I am devoting this year, and the coming year, to improving my English in order to obtain an official certificate that will enable me, together with this Master’s degree, to steer my future to teaching Spanish abroad. That is why I am willing to work hard to gain the European Mention which is associated with this Master’s.

Students show in these W moves that they are competent in using attitude markers and self-mention cues to express their stance in the different moves of the letter. This is an outstanding resource, as motivation letters are ‘a rich source of interactional features that allow us to see how individuals work to position themselves as potential members of a discourse community’ (Bekins et al., 2004: 57).

Just as the most systematic W move is the letter closing and signature, in the case of R moves the opening (greeting the reader) also happens to be the most recurrent element in the corpus: 42 letters include an opening salutation (84%). However, the writers do not seem so sure about who the addressee should be, ranging from a single individual to a whole group, as illustrated in (12):

(12) Att. a quien corresponda (ct22)/ Estimada Universidad (ct14) /Estimado destinatario (ct47)/ Señores, (ct29)/Estimado señor o señora: (ct2)/Estimados Sr. *** y Sra. ***. (ct34)/Estimados Profesores de Comité de Selección: (ct23)/Estimado equipo de coordinación del master (ct18)/etc.

To whom it may concern/Dear University/Dear addressee/Sirs,/Dear Madam or Sir,/Dear Mr *** and Mrs ***:/Dear Professors of the Selection Committee:/Dear management team for the Master’s/etc.

In contrast to stance, the engagement resources (Hyland, 2005) are not well controlled by the authors of the letters: there are doubts in relation to reader pronouns and shared knowledge. The variety in greeting the audience can be explained by the ‘occluded genre’ nature of motivation letters.

As for the persuading the reader move, it appears in most (76%) of the letters, but it does not always appear in the same place. In some of the letters, it appears after greeting the reader; in others, it is written immediately after introducing the letter’s aims or even after the reasons for applying move; this is due to the cycled nature of the moves. The following (13) shows the wording used (underlined) to persuade the MA coordinators of the suitability of a given candidate:

(13) Puedo enumerar varias razones más que me motivan a ingresar y cursar la maestría ofrecida por vosotros, por ejemplo el prestigio con que cuenta la Universidad […] y el
I can list several more reasons that motivate me to enrol and take the Master’s course you offer, such as the prestige of the University […] and the undeniable fact that the course, the university, and also the city itself constitute a recognized intercultural space, which to my mind is an asset in its own right.

The ending politely segment is found in most of the letters, as a mark of politeness aimed at ‘gaining the benevolence’ of the addressee before closing. It is used in 68% of the letters, with a variety of wordings which express gratitude for the reader’s attention and appeal to the addressee’s openness toward a final acceptance of their application. Prototypical forms are in (14):

(14) esperando que mi solicitud sea bien acogida. (ct5)/Gracias por la atención prestada (ct6)/Gracias por su tiempo y resto a la espera de recibir noticias suyas. (ct11)/Muchas gracias por tomarse la molestia de leer esta carta, esperando los resultados (ct21)/Espero que consideren mi petición de forma favorable y le agradezco su tiempo. (ct25)

Hoping my application will be welcome./Thank you for paying attention./Thank you for your time and I look forward to hearing from you./Many thanks for taking the trouble to read this letter, I await the results./I hope you consider my application favorably and I thank you for your time.

Microlinguistic features

This section presents our analysis in the corpus of the modalization cues and DMs, as described earlier. Modalization cues are frequent in the parts that define the text as a motivation letter: W moves reasons for applying and expressing future expectations, and the R move persuading the reader. Noteworthy are the writer’s self-references (self-mention elements) when expounding personal motivations, also in the section for persuading the addressee; (15), (16) and (17) are representative examples of this:

Reasons for applying:

(15) El primero de ellos [motivos] se remonta a mis estudios de bachillerato. En aquella época, la lengua española suscitó mi interés por su estructura, sus mecanismos, su léxico, […]

Otro motivo es que la lengua española ha supuesto para mí una herramienta profesional a la que he tenido la suerte de estar vinculado de manera permanente durante trece años. […]

Por último, me gustaría destacar otra razón que considero imprescindible. Es la ilusión. Porque si pudiera realizar estos estudios y acceder a la docencia del español, lograría orientarme de manera más eficaz a una profesión a la que deseo mucho acceder; también desde la responsabilidad. […] (ct1)

The first one [of the motives] dates back to my high school studies. In those days, Spanish caught my interest because of its structure, its devices, its vocabulary, […]
Another reason is that Spanish, for me, has been a professional tool and I have had the luck to be in constant contact with it over the past thirteen years […]

Lastly, I would like to point out another reason I consider essential. That is hope. Because if I could take this course and get into teaching Spanish, I would manage to focus my career more effectively in a profession that I honestly hope to join, also from responsibility.

**Persuading the reader:**

(16) *El año pasado perdí el periodo de preinscripción por 15 días y por eso, a pesar de mi máxima motivación, no pudieron tener en cuenta mi candidatura. Lo entendí perfectamente y acepté esperarme hasta el año siguiente para intentarlo de nuevo. Desde entonces han pasado varios meses pero mi motivación no ha dejado de crecer.* (ct9)

Last year I missed the pre-enrollment period by two weeks and that is why despite my highest motivation my application could not be considered. I understood completely and I accepted that I had to wait until the following year to try again. Since then several months have gone by but my motivation has kept growing.

**Expressing future expectations:**

(17) *Mi proyecto a partir de esta formación es poder viajar al extranjero para impartir clases. […] sé que una formación de calidad sumada a la experiencia me podrían abrir muchas puertas en otros países. Me entusiasma poder participar en el incremento de la calidad en la docencia de E/LE en todo el mundo.* (ct7)

My plan if I get this training is to be able to travel abroad to teach. […] I know that quality training added to my experience could open a lot of doors for me abroad. I am enthusiastic to be able to participate in the rise in quality in teaching Spanish as a foreign language all over the world.

The three moves shown in (15)–(17), and Figure 5((f), (g), (h)), stand out secondly because of the frequency of use of **attitude markers**, as noted in (18):

(18) * […] el español sea parte vital de nuestra cultura, sino porque además representa un hecho social que incentiva el intercambio cultural, el entendimiento entre las personas y su integración en diversos contextos, aspectos todos ellos tan necesarios en nuestros días.* (ct1)

Spanish is an **essential** part of our culture, and also because it represents a social reality that promotes cultural exchange, understanding among people and their integration in a variety of contexts, all of these **such necessary** aspects today.

Mentions of the audience, of course, stand out in the R moves **greeting the reader**, **persuading the reader**, and **ending politely** as well as in **reasons for applying**, as can be seen in (19):

(19) *Como podrán darse cuenta por mis estudios universitarios, mi interés por la diversidad lingüística y el intercambio idiomático siempre ha sido de gran importancia en mi vida.* (ct5)
As you can see from my university studies, my interest in language diversity and exchange has always been of great importance in my life.

(19) is a form of engagement (Hyland, 2005): the readers are mentioned to focus their attention and to include them as discourse participants, which allows writers to lead readers through the argument actively.

Turning to DMs, the data showing co-occurrences, Figure 5, are the following: the one that predominates is DMs of discourse structure in the reason for applying move (20) and in the persuading the reader move (21):

(20) Aparte de los motivos ya descritos anteriormente, los principales motivos que me movieron a solicitar la preinscripción en este master [...] son:

1. **En primer lugar**, considero que la estructura y el plan de estudios del master responden a la perfección a mis necesidades formativas. [...] 
2. **En segundo lugar**, el prestigio que atesora la Universidad [...] 
3. **Una última razón** de peso para mi deseo de realizar este master en esta universidad es el hecho de poder realizarlo en una ciudad tan cosmopolita e interesante como Barcelona. (ct16)

Besides as the reasons already described above, the main reasons that moved me to apply for enrolment in this Master’s degree [...] are:

1. **In the first place**, I consider the structure and curriculum of the Master’s to fit in perfectly with my educational needs. [...] 
2. **Secondly**, the prestige that is held by the university [...] ,
3. **The final reason** of importance why I wish to undertake this Master’s in this university is to be able to do it in such a cosmopolitan and interesting city as Barcelona.

(21) **Primero que todo**, gracias por la oportunidad de poder postular a este Máster en tan prestigiosa casa de estudios (ct5)

**First of all**, thank you for the opportunity for me to apply for this Master’s in such a prestigious place of study.

**Conclusion and future lines of research**

From our initial research questions, the following four conclusions can be established. First, the most prominent macrotextual features in motivation letters in the Spanish corpus analyzed are the following five moves, all of which are present in at least 70% of the 50 motivation letters studied: persuading the reader, introducing the applicant and letter objectives, reasons for applying, expressing future expectations, and final greeting and signing.

Second, about the prototypical microlinguistic characteristics, the ones that stand out among the modalizing elements are attitude markers and self-mention elements; their frequency of use is accounted for by the promotional nature of any motivation letter,
López-Ferrero and Bach

whereby its writer needs to include some self-promotion. As for DMs, the most frequent ones are the DMs of discourse structure, given the organized exposition of motives as a requirement for this argumentative text.

Third, there are significant correlations between the macro- and micro-features identified. In the W moves, there is an understandable abundance of forms for referring to the first person of the writer; in the R moves, the same is the case in forms for referring to the reader. The DMs of discourse structure are predominant in the reason for applying move.

Finally, we conclude that the letters we have analyzed here are a hybrid genre (Bhatia, 2004) as they share academic and professional features at different levels: pragmatic (academic goals in conjunction with professional ones), informational (content), and linguistic (style). A motivation letter fits the criteria both of the academic type that has to be approved as matching the profile of the eligible student for a particular Master’s program and of the professional texts (the cover letter that is attached to a CV in a job application). In this sense, Bhatia (2004) argues that discourse genres have to be understood and described in terms of ‘genre families’ or ‘genre colonies’: motivation letters are hybrid forms because they share pragmatic, textual, and linguistic traits from different genre families. They have content intersections with other academic ‘promotional’ genres such as reference letters or curriculum vitae (Swales and Feak, 2011); at the same time, they share structural features with media genres such as letters to the editor and with literary genres as epistolary novels; finally, motivation letters also have many elements in common with job application letters.

All of these features show the image that graduate writers have of what constitutes an ideal type of motivation letter, as well as their mastery of written discourse. The fact that motivation letters are a hybrid genre, a combination between academic and professional texts, explains that among the writers of our corpus there is a certain amount of hesitation, especially when it comes to using some of the procedures for interacting with the audience, those that have to do with opening salutation (greeting the reader) and with finishing off the letter (ending politely) just before closing and signature. Hesitations in interaction reflect that the writer only has a vague idea of the person who is to read the motivation letter and the proper type of relationship that one is expected to establish. The ‘occluded genre’ nature of the text would explain this perplexity.

The inconsistencies pointed out are related to the interpersonal dimension of discourse and especially with engagement (Hyland, 2005). Regarding the analysis of the genre under study, we could claim that graduate students are competent in stance resources when writing motivation letters but need to improve their engagement skills. The analysis of the audience is central in a genre family theory (Bhatia, 2004; Ciapuscio, 2007) to distinguish the different nature of the addressee in each genre member of the family. The W moves are clearer than R moves in the genre competence of motivation letters. The results of our study point to the need to uncover and contrast the communicative and linguistic features in each of the members of a genre family and their status in academic and professional settings (Bach and López-Ferrero, 2011).

Thus, the future lines of research emerge, related to the data and to the method of analysis. In terms of data, additional texts could be investigated: motivation letters relevant to other MA programs and/or written in other languages and/or relevant to other
cultures/countries; and neighboring genres could be analyzed: letters of applications, submission letters, and reference letters. Additional methods giving further insights into the genre of motivation letters could come from a corpus-driven identification of recurrent phraseologies or interviews with faculty selecting applicants, for example. All this research would shed light on the most effective procedures to achieve a positive assessment in Spanish motivation letters, and it would, therefore, contribute to the genre analysis pedagogy.

Acknowledgements
This article is related to the project IES 2.0: Digital literacy practices. Materials, classroom activity and online language resources (EDU2011-28381; 2012–2015) are from the Spanish government Plan Nacional de Investigación Científica, Desarrollo e Innovación Tecnológica 2011. The authors of this article also belong to the Gr@el research group (Grup de recerca sobre aprenentatge i ensenyament de llengües; Research group in language learning and teaching), a consolidated research group financed by AGAUR 2014–2016 (ref. 2014 SGR 1042-F).

Declaration of conflicting interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) received no financial support for the research, authorship and/or publication of this article.

Notes
1. See, for example, the following sites, among others: http://www.gotostudyabroad.com/study-abroad/documentation/letter-of-motivation/sample-of-letter-of-motivation.htm (English); http://www.contenidoweb.info/otros/carta_de_motivacion.htm (Spanish).
2. A Master’s candidate introduces his or her personal references: name and surname.
3. The title is not actually part of the structure of all motivation letters.
4. Just as the name of the candidate for the Master’s is shown, this part of the letter is to show when (date) and where it was written.
5. All of the examples drawn from the corpus are verbatim transcriptions.
6. The authors of the letters have given their consent for the study, with their anonymity guaranteed. This is why all proper names have been omitted.

References
Bach C and López-Ferrero C (2011) De la academia a la profesión: análisis y contraste de prácticas discursivas en contextos plurilingües y multiculturales. Cuadernos Comillas 1: 127–138.
Barton E, Ariail J and Smith T (2004) The professional in the personal: The genre of personal statements in residency applications. Issues in Writing 15(1): 76–124.
Bekins LK, Huckin TN and Kijak L (2004) The personal statement in medical school applications: Rhetorical structure in a diverse and unstable context. Issues in Writing 15(1): 56–75.
Bhatia VK (1993) Product and self promotion in business settings. In: Bhatia VK (ed.) Analysing Genre: Language Use in Professional Settings. London; New York: Longman, pp. 45–75.
Bhatia VK (2004) Worlds of Written Discourse. London: Continuum.
Brown R (2004) Self-composed: Rhetoric in psychology personal statements. *Written Communication* 21: 242–260.

Burguera JG (2006) Mecanismos argumentativos en las cartas al director: la interrogación retórica. *Pragmalingüística* 14: 7–23.

Ciapuscio G (2007) Genres et familles de genres: apports pour l’acquisition de la compétence générique dans le domaine académique. *Études de Linguistique Appliquée* 148: 405–416.

Ciapuscio G (2010) Estructura ilocucionaria y cortesía: La construcción de conocimiento y opinión en las cartas de lectores de ciencia. *Revista Signos* 43(1): 91–117.

Ding H (2007) Genre analysis of personal statements: Analysis of moves in application essays to medical and dental schools. *English for Specific Purposes* 26: 368–392.

Friese S (2014) *Qualitative Data Analysis with ATLAS.ti*. Washington, DC; London: SAGE.

Garrido J (2005) La persuasión en las cartas al director. Estructura del discurso, proceso de resumen y evaluación de estrategias retóricas. *Llengua, Societat i Comunicació* 3: 31–46.

Gillaerts P (2003) A textlinguistic and genological approach to the letters of application. *Journal of Linguistics* 31: 105–117.

Halliday MKA (1994) *An Introduction to Functional Grammar*. London: Edgard Arnold.

Hasan R, Matthiessen C and Webster J (eds) (2005) *Continuing Discourse on Language: A Functional Perspective*. London: Continuum.

Hyland K (2005) Stance and engagement: A model of interaction in academic discourse. *Discourse Studies* 7(2): 173–192.

Hyland K (2007) Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Learning* 16: 148–164.

Martin JR and Rose D (2007 [2003]) *Working with Discourse: Meaning beyond the Clause*, 2nd revised edn. London: Continuum.

Martin JR and Rose D (2008) *Genre Relations: Mapping Culture*. London: Equinox.

Montolío E and López A (2010) Especificidades discursivas de los textos profesionales frente a los textos académicos: El caso de la recomendación profesional. In: Parodi G (ed.) *Alfabetización académica y profesional en el siglo XXI: Leer y escribir desde las disciplinas*. Santiago de Chile: Ariel, pp. 215–245.

Newman S (2004) Tales of the professional imaginary: Personal statements for medical school at Johns Hopkins, 1925 to the present. *Issues in Writing* 15(1): 31–55.

Redeker G (1990) Ideational and pragmatic markers of discourse structure. *Journal of Pragmatics* 14: 367–381.

Samraj B and Monk L (2008) The statement of purpose in graduate program applications: Genre structure and disciplinary variation. *English for Specific Purposes* 27: 193–211.

Sancho Guinda C and Hyland K (2012) Introduction: A context-sensitive approach to stance and voice. In: Hyland K, Sancho Guinda C and Sancho Guinda C (eds) *Stance and Voice in Written Academic Genres*. New York: Palgrave Macmillan, pp. 1–11.

Schiffrin D (1987) *Discourse Markers*. Cambridge: Cambridge University Press.

Swales J (1990) *Genre Analysis: English in Academic and Research Settings*. Cambridge: Cambridge University Press.

Swales J (1996) Ocluded genres in the academy: The case of the submission letter. In: Ventola E and Mauranen A (eds) *Academia Writing: Intercultural and Textual Issues*. Amsterdam: John Benjamins, pp. 45–58.

Swales J and Feak CB (2011) *Navigating Academia: Writing Supporting Genres*. Ann Arbor, MI: University of Michigan Press.

Van Dijk TA (2000) El estudio del discurso. In: Van Dijk TA (comp.) *El discurso como estructura y proceso*. Barcelona: Gedisa, pp. 21–65.
Author biographies

Carmen López-Ferrero is a Professor of Spanish Language and Discourse Analysis at Universitat Pompeu Fabra (UPF, Barcelona, Spain) and a researcher of the consolidated research group Gr@el-UPF. She graduated in Spanish Philology (Language) and she received her doctorate in Philosophy and Sciences of Education from the University of Barcelona. She has published several books and articles on Discourse Analysis and Spanish Language Learning as L1 and L2. Her research focuses on academic and professional discourse, written communication, and applied linguistics. Personal website: https://www.upf.edu/pdi/carmen_lopez_ferrero/

Carme Bach is a Professor of Catalan Linguistics at University Pompeu Fabra (UPF, Barcelona, Spain) and a researcher of the consolidated research group Gr@el-UPF. Her research focuses on General Discourse Analysis, Language Learning and Teaching, and Applied Linguistics. Her publications deal with connectives, reformulation, and its importance in the process of specialized discourse construction and in extraction of semantic information of specialized discourse. Her PhD thesis about reformulation markers includes a lexicographical implementation prototype for these units. Personal website: https://www.upf.edu/pdi/dtf/carme.bach/index.htm