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The rhetorical structure of technical brochures: A proposal for technical writing

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Abstract

Nowadays, in many professional contexts native-speakers of Spanish are required to write technical texts in English. Texts belonging to the same genre follow certain rhetorical and phraseological conventions. The aim of this paper is to assist in the technical writing of this particular text type through a discourse analysis of their rhetorical structure. A corpus of technical brochures has been compiled and analyzed into moves and steps. Next, the most typical lexico-grammatical structures in each move and step have been extracted. The linguistic information obtained has been used to build specific software to generate technical brochures in English (GITEC).

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1. Introduction

This paper presents an analysis of the rhetorical structure of technical brochures in English based on corpus data. Texts used in the context of professional environments tend to be written following certain conventions that make them recognizable as belonging to a particular genre. Bhatia defines genre as referring essentially to “language use

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in a conventionalized communicative setting in order to give expression to a specific set of communicative goals of a disciplinary or social institution which gives rise to stable structural forms by imposing constraints on the use of lexico-grammatical as well as discursive resources.” (Bhatia 2004: 23). These conventions share an overall structure where all the texts contain a similar arrangement of purposeful communicative units determined by the context of use. Several authors have proposed ways of describing the different functional units within texts that identify them as belonging to a particular genre, including the typical linguistic features associated to each unit (Bhatia 1993, 2004; Swales 1990, 2004; Biber et al. 2007).

It is becoming increasingly common that non-native speakers of English who work in various professional environments and have an intermediate level of English are required to produce texts for specific purposes in their own fields of interest in English; among others, this includes brochures for promoting and selling specific technical products and/or services. This study is prompted by the need to assist these professionals in writing techniques. The ACTRES project currently in progress at the University of León, Spain (<http://actres.unileon.es>), aims at building software for professional writing in a number of different fields, including medical abstracts, meeting minutes, online advertisements (Labrador et al. forthcoming), and others, since “the participation of individuals in disciplinary cultures demands an informed pragmatic understanding of how to construct and interpret key genres.” (Hyland 1998, p. 453).

A corpus of 38 brochures representing a wide range of technical products and/or services has been compiled. The texts were obtained in the form of pdf documents downloaded from the corporate websites available on the Internet. The corpus contains all in all 45,732 words, with an average number of approximately 1,200 words per text. A preliminary analysis of a small number of texts provided a tentative list of rhetorical tags to be used in the process. Swales’ move-step method (1990, 2004) was used to tag the texts with rhetorical labels using specific *ad hoc* software. This software enables us to extract concordances in particular moves and steps. According to Biber et al., a move “refers to a section of a text that performs a specific communicative function. Each move not only has its own purpose but also contributes to the overall communicative purpose of the genre” (Biber et al., 2007, p. 23). A move can be further divided into steps to give an account of more detailed rhetorical structures. All these purposes together contribute to shaping the lexical content and style of texts in a particular genre so that all the texts exhibit “various patterns of similarity in terms of structure, style, content and intended audience” (Swales 1990, p. 58).

The specific phraseology typical of a particular move or step is thus easily retrieved. A total of 8 different moves were identified in technical brochures in English and analyzed in detail to obtain the most relevant lexico-grammatical elements contained in each of them to produce a number of ‘model lines’ for the writing of brochures.

The aim of this study is to provide a detailed account of the various moves and steps that conform the sub-genre of technical brochures in English, as well as their prototypical linguistic structure, to help professionals in various technical fields in the writing of this specific text type.

2. Data and method

This study is a corpus-based analysis. Our corpus contains 38 technical brochures from a number of different companies comprising 45,732 words. These brochures were all downloaded from official websites freely available on the Internet. All the texts were collected between 2010 and 2011 and dealt with products from different industries including electronics, mechanical engineering, chemistry, information technologies, etc.

The corpus was tagged for rhetorical moves to determine the internal structure of this text type. The identified rhetorical structure was fed into a specifically designed computer program (ACTRES Text Tagger) which enabled us to tag all our texts with the corresponding rhetorical moves. Next, an *ad hoc* browser was built for extracting in each move and step concordances and statistical information that enabled us to gather an inventory of the most recurrent patterns observed. We extrapolated these patterns so that they could be used with other products, designing what we call ‘model lines’. These model lines are writing suggestions with the prototypical lexico-grammatical

structures and phrasings most commonly employed in each move and step, but without any specific reference to a particular product or industry. The model lines contain gaps to be filled by the user in each particular case, as in *At (nombre de la empresa) we are with you every step of the way to help you achieve (objetivo)*, where the user is only required to fill in the data in brackets, which is in Spanish as the target users will be native speakers of Spanish.

Additionally, a semi-technical English-Spanish glossary was compiled with the aim of helping the potential users in their technical writing. All these data have been used for building a generator of English technical brochures, a sort of template guiding the Spanish-speaking user through the writing process of the various moves and steps required. With each model line, real material from the corpus is provided to serve as an example.

Model line: *At (nombre de la empresa) we are with you every step of the way to help you achieve (objetivo)*.

Example: *At Air Products, we are with you every step of the way to help you achieve greater profits with fewer defects.*

3. Results and discussion

In this section we will present the list of rhetorical moves and steps identified and the model lines typically used to fulfill the different functions within these moves and steps. The following is a complete list of rhetorical tags obtained and used for the analysis:

MOVE 1: < INTRODUCTORY MATERIAL >

Step 1. <company name>

Step 2. <title>

Step 3. <product name>

Step 4. <brief purpose of product>

Step 5. <motto/ company objective>

MOVE 2: < POSITIVE PRESENTATION OF THE COMPANY >

MOVE 3: < PRESENTATION OF THE NEED/ PROBLEM >

MOVE 4: < DESCRIPTION OF PRODUCT >

Step 1. <outstanding features >

Step 2. <general features>

Step 3. <specific features>

MOVE 5: < PURPOSE >

MOVE 6: < RESULTS >

MOVE 7: < BENEFITS >

MOVE 8: < CONCLUDING MATERIAL >

Step 1. <links for more information>

Step 2. <contact information>

Step 3. <copyright information>

Table 1 shows the number of words included in each of the different moves, as well as the number of texts that contain this particular move.

Table 1: Number of words in each move and number of texts with a particular move.

	Number of words	Number of texts with this move out of 38
Move 1. Introductory material	662	37
Move 2. Positive presentation of the company.	1,616	12
Move 3. Need/ problem	1,645	13

Move 4. Description of product.	27,055	36
Move 5. Purpose	5,349	26
Move 6. Results	4,902	18
Move 7. Benefits.	1,757	13
Move 8. Concluding material.	2,746	36
TOTAL	45,732	

Move 1, the introductory material, includes data such as the name of the company, the title of the brochure, the name of the product or service promoted. Nearly all the texts contained this move and not too many words are required to express this function. One typical step in this move is the motto of the company, usually expressed by some short catchy phrase on the front page, for example: *Taking performance to a new peak; The best protection ... is rapid detection; Visibility and present weather sensors you can trust.*

Move 2 deals with the positive presentation of the company. This particular move is only included in 12 out of 38 of the brochures in our corpus and represents a more elaborate type of report. An example would be: *Our expertise can provide improved profits, uptime, defect reduction, and an overall improvement in the total cost of ownership for your integrated circuit (IC) packaging and printed circuit (PC) board assembly processes.*

Move 3 presents the problem or need the company tries to solve with the product described in the brochure (e.g. The challenge: Providing the sensitivity and throughput required to meet the demands of biomarker validation in large numbers of extremely complex samples.) Again, this is not one of the most representative moves in our corpus, but it enhances the quality of the brochure.

The actual description of the product is contained in move 4, which is by far the largest move in size with over 27,000 words in our corpus and nearly all texts contain it. This move includes different types of features – outstanding, general and specific. Outstanding features are usually short lists of characteristics somehow highlighted and often displayed on the front page of the brochure, as in the following example:

Key Features:

- Stand-alone thermal weapon sight
- Clip-on thermal weapon sight
- Hand held observation/surveillance sight. The general features

As for general and specific features, they include more or less the same content, but general features are broadly described in paragraph form, and the specific features give more detailed data and figures in list format.

Moves 5, 6 and 7 are closely related to each other and include information on the purpose of the product, the results obtained by its use, and the benefits implied by its use, sometimes compared with the results provided by other similar products (e.g. *An Asian-based electronics assembly company has achieved improved production efficiencies and cost savings.*). The most important of these three moves is purpose, both in terms of number of words and occurrences in the corpus. Next comes results, with 18 texts in the corpus including it, and finally benefits is a move that tends to appear only in the most elaborate texts (13 out of 38).

Move 8 comprises the concluding material, that is, the links to more information, contact details (mainly postal and e-mail address) and the copyright data. As expected, this move is extremely frequent as virtually all the texts in the corpus contain it.

The numerical data show that the three moves that are absolutely essential in a technical brochure and should never be omitted are the introductory and concluding material, together with the description of the product. The remaining moves contribute greatly to improve the final version of the text and our technical writing tool accounts for all of them, as their inclusion enhances the quality of the final brochure.

Once the various moves were identified, we extracted linguistic material to build the model lines required for the generator. Thus, the user will have available a list of suggestions with gaps to be filled and eventually customize their own technical brochure.

4. Conclusions

In this paper we have described the rhetorical structure of one particular text type: technical brochures. The final aim of this description is to assist native speakers of Spanish in their technical writing by providing a template of prototypical English moves and steps, as well as pre-written model lines to be followed and customized by each user. The information obtained has been used to build computer software that guides the writer through this writing process. This software will be tested by a sample of professionals in the field to obtain the necessary feedback before marketing the final version.

A total of 8 rhetorical moves, some of them with steps, were identified: introductory material, the presentation of the company, the description of the problem addressed in the brochure, the actual description of the product, the purpose, results and benefits of the products, and finally the concluding material, with specific information about the company. An ad hoc browser allowed us to exploit the corpus and design a number of model lines to fill each step and move. Statistical data were extracted using this browser which illustrated the frequency of occurrence of each of these moves in the whole corpus, together with the total number of words of each move. A semi-technical English-Spanish glossary was also compiled and included in the writing software.

The empirical study of all this authentic material revealed which moves we would recommend our final users to include in their brochures, and, on the other hand, which phrases are the most common ones in each section and to express each particular function. It was also the source of data for the glossary. Finally, the tool built with the information presented in this paper is one of a series of generators (Register Number: LE-45-14), each for a particular genre, and the overall purpose is to assist Spanish professionals in their technical writing in various fields.

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