

Two ways to reformulate: a contrastive analysis of reformulation markers

Maria-Josep Cuenca*

*Universitat de València, Departament de Filologia Catalana,
Avinguda Blasco Ibáñez, 32, 46010 València, Spain*

Abstract

The aim of this paper is to present a contrastive analysis of reformulation markers in English, Spanish and Catalan. The study is based on a corpus of expository prose (mainly academic writing). The analysis shows coincidences in the sources of the markers and differences in the variety of forms expressing reformulation as well as in their frequency of use. Assuming that grammaticalization processes such as those leading to the creation of connectives have their roots in discourse, parallel differences are expected to be found in text construction. The present paper argues that the differences identified in the grammar of English vs. those of Spanish and Catalan can be associated with two distinct styles for building academic texts.

© 2003 Elsevier Science B.V. All rights reserved.

Keywords: Reformulation; Discourse markers; Contrastive rhetoric; Grammaticalization; Academic writing; Spanish; Catalan; English

1. Introduction

Seminal papers on event-frames by Talmy (1985, 1991), and especially the illuminating study by Slobin (1996), establish a line of research that can be called *Cognitive Contrastive Analysis* (cf. Ungerer & Schmid, 1996: § 5.3). Talmy argues that a motion event frame consists of four main components (figure, ground, motion and path) and two optional components (manner and cause), and distinguishes two patterns to express a motion event syntactically. These two patterns differentiate satellite-framed languages, such as English (e.g., *The boy rode out of the courtyard*), from verb-framed languages, such as Spanish (e.g., *El chico salió del patio a caballo*, literally: ‘The boy exited (of) the courtyard on horse’).

* Corresponding author.

(1)	The boy FIGURE	rode MOTION MANNER	out of PATH	the courtyard GROUND
(2)	El chico FIGURE	salió MOTION PATH	del patio GROUND	a caballo MANNER

In satellite-framed languages (1), the verb expresses motion and manner, while a satellite (in English, a preposition) indicates the path. In verb-framed languages (2), the verb expresses motion and path, while manner remains unexpressed or is expressed by an adjunct. This difference in grammar can be seen to imply a difference in the conceptualization of the motion event frame in both types of languages.

Slobin extends Talmy's analysis to a corpus of English and Spanish oral narrations, on the one hand, and to ten novels and their corresponding translated versions, on the other hand.¹ His study shows that the narrative styles of both languages differ. Spanish narrators and translators tend to omit information about manner and path, whereas English narrators and translators include or add information about the manner, which is incorporated in the meaning of the verb (i.e. *ride* = *move on a horse*). They also tend to include information about the path, which is expressed by means of a satellite (the preposition in a phrasal verb, i.e. *rode out*).

Assuming this version of Contrastive Analysis, which follows the principles of Cognitive Linguistics and focuses on differences among grammars and typologies of rhetorical text structuring, I will try to establish differences in the grammar of English, Spanish, and Catalan reformulation markers, and relate them to differences in the rhetorical strategies used to build expository texts in these languages.

Following the procedure outlined by Talmy (1985: 57–58) in his study of the motion event frame, four aspects will be discussed in this paper:

- a. The definition of reformulation (Section 2).
- b. The surface entities—markers—that express paraphrastic reformulation in the three languages considered (Section 3).
- c. The matching of the semantic-pragmatic features of reformulation with the components of their markers, which identify the grammatical commonalities across languages (Section 4).
- d. A cross-linguistic comparison at two levels: grammar (Section 5) and discourse (Section 6).

Since reformulation typically takes place in expository texts, the study will be based on a corpus of academic writing in English, Spanish, and Catalan, mainly from the field of linguistics. A selection of papers, containing approximately 40,000 words for each language, has been used for the analysis. However, a larger corpus has also been used to identify the forms and to exemplify them.²

¹ See also Aske (1989) and Sebastian and Slobin (1994).

² The selected papers are included in the collective works edited by Casad (1995), for English; Briz et al. (1997), for Spanish; and Payrató (1998) and Lorente et al. (2001), for Catalan. The whole list of corpus references is found after the general reference list.

The analysis of the markers shows two general facts:

- (i) There are remarkable differences in the degree of structural complexity and fixation of reformulation markers. These differences will be captured by the distinction between simple and complex markers.
- (ii) There are cross-linguistic similarities in the structure of the markers and in their lexical sources. Nonetheless, by comparing the number and variety of forms among the three languages considered, it is possible to conclude that English tends to prefer simple fixed forms, while Catalan and especially Spanish exhibit a wider range of complex forms.

Finally, I will discuss the hypothesis that the differences observed in the grammar of English vs. Spanish and Catalan can be related to two distinct styles of building expository texts.

2. Reformulation

Reformulation is a discourse function by which the speaker re-elaborates an idea in order to be more specific and “facilitate the hearer’s understanding of the original” (Blakemore, 1993: 107), or in order to extend the information previously given. Generally speaking, reformulation is based on an equivalence operation such that two utterances are shown as different ways to express a single idea (i.e., the second utterance is presented as a *paraphrase* of the first one).³ Consider the following example:

- (3) En esta página observamos la presencia de 62 unidades verbales: 51 se hallan en nuestro centenar y otros once verbos no, pues son específicos de la conversación grabada. **O sea**, un 82% de los verbos que se emplean en esa página corresponde a nuestra lista seleccionada. (PRAG, 134–135)

In this page we observe the presence of 62 verbal units: 51 are included in our 100 and eleven are not, since they typically appear in the recorded conversation. O sea (‘that is’; literally: ‘or be-subjunctive’), *82% of the verbs used in this page correspond to our selected list.*

In (3), the author reports on the results of a corpus analysis in two different ways: first, by means of numbers (‘51 out of 62 verbal units are in the list’); second, by means of a percentage (‘82% of verbal units are in the list’). Thus, the second sentence is a paraphrase of the first sentence, and both can be considered alternative formulations of a single idea (the proportion of verbs found in a corpus), as represented in Fig. 1.

Example (3) illustrates that whenever a speaker presents two contents as alternative formulations, they are meant to be somehow equivalent. Yet “some kind of

³ Several scholars consider reformulation as an equivalence operation at the metatextual level (cf. Bach, 1996, 2000a, 2001a; Cabré, 1995; Fuchs, 1982; Fuentes, 1993). Still, all of them insist that strict equivalence is hardly ever the case.

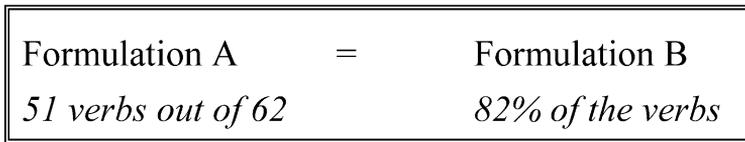


Fig. 1. Paraphrastic reformulation as an equivalence operation.

‘variation’ is at least *suggested*” (Gülich and Kotschi, 1995: 42). This variation often implies that reformulation is more than a strict paraphrase. It can imply discourse values such as explanation, specification, generalization, implication, gloss or summary (see Blakemore, 1993: 2; Bach, 1996, 2000a, 2001a,b; Gülich and Kotschi, 1983, 1987, 1995). For example, the second utterance in (4) is an implication of the first one rather than a paraphrase:

- (4) Pero son claras dos cosas: por una parte, que los niveles de lengua se interrelacionan en el uso de una determinada lengua; **es decir**, que el análisis en niveles es únicamente metodológico. (PRAG, 300)
But two things are clear: on the one hand, that the levels of language are interrelated in the use of a certain language; es decir (‘that is’; lit.: ‘is to say’), *that the analysis into levels is purely methodological.*

In cases like (3), B paraphrases A ($A \approx B$). However, in cases like (4), the connective does not express equivalence, but ‘creates’ the equivalence (Gülich and Kotschi, 1995: 43). In (4), equivalence holds from a pragmatic point of view, but not necessarily from a logical or propositional one, since the two contents (A and B) cannot be identified (that is, $A \neq B$, $A \rightarrow B$).

Following Gülich and Kotschi (1987, 1995), reformulation can be described as an operation by which the content in the first utterance (A) can be either expanded or reduced by the second utterance (B). Utterance A can be expanded by specification, if B introduces new aspects, as shown in (5), or by explanation, if B defines a concept, as shown in (6).

- (5) (2) A “less accessible” concept is more likely to be transformed into a “more accessible” one, than vice versa [...]
 What evidence might support the cognitive constraint in (2) (applied to similes)? **That is:** What is the evidence for the claim that violating this constraint results in a “less natural” and (relatively) difficult-to-process metaphor compared with its inverse? (CL, 45)
- (6) Rosch’s experiments disproved the classical theory on all counts and led to her own theory of natural categorization (1973), according to which human beings categorize in the form of *prototypes -in other words*, the natural category has a focus or “hard core” and fades off at the edges. (TRA, 27)

Utterance A can be reduced by summary (7), when B expresses A in brief, or by denomination (8), when B is a conceptualizing expression for some complex matter.

- (7) [...] different semantic representations of a particular verb stem, i.e., different verb senses, are related by generative lexical rules [...]. (CON, 8)

- (8) For the last forty years “translation science,” or “translatology”, has been trying to establish itself as a new discipline [...]. (TRA, 1)

To summarize, reformulation comes into play when someone says something that has been previously said in an alternative way (‘in other words’) and assumes that the two formulations can be equated either from the semantic or the pragmatic point of view. Reformulation, however, is not a simple discourse function. It should be considered a complex semantic category that ranges from strict paraphrase to other values such as specification, explanation, summary or denomination, and even to non-paraphrastic meanings such as implication, conclusion and contrast.⁴

3. Reformulation markers

Reformulation markers⁵ can be classified in two groups, according to whether they are simple or complex forms. Simple forms are structurally fixed, that is, they are not alterable by replacing any of their members or by the addition of other constituents. On the other hand, complex markers exhibit a more complicated structure and tend to be variable, that is, they are usually modifiable by the replacement and/or the addition of other constituents. The features of the two types of connective can be compared in (9) and (10).

- (9) People metaphorically conceptualize *anger*, in this instance, in terms of heated fluid in a container (i.e., ANGER IS HEATED FLUID IN A CONTAINER) (COG, 44)
- (10) A complex structure like the 2-B can be strongly sanctioned quite apart from full sanction by any other structure: the structure as a whole may be partially sanctioned in varying degrees by more than one structure. **Or to say the same thing a different way**, certain aspects of the construction may be fully sanctioned by certain aspects of other grammatical structures, without the whole being fully sanctioned by any. (COG, 726)

The connective *i.e.* (9) is completely fixed, exhibits no predicative structure, and has changed its original referential meaning (Latin *id est* ‘that is’) into a discourse meaning (‘reformulation’). In contrast, the complex connective *to say the same thing a different way* (10) keeps the structure of a final clause and (partially) its

⁴ Some authors have distinguished two general types of reformulation: paraphrastic and non-paraphrastic (e.g. Rossari 1994). Paraphrastic reformulation connectives, such as *i.e.*, *namely*, *in other words*, *that is* and others, indicate equivalence. Alternatively, non-paraphrastic reformulation connectives, such as *in fact*, *actually*, *as a matter of fact* and others, tend to foreground the contrastive nuance derived from presenting two contents as alternative formulations. In this paper, only paraphrastic reformulation will be taken into account, as non-paraphrastic reformulation cannot be considered reformulation in the sense defined here, i.e. as an equivalence operation.

⁵ There are few studies of these markers in English (see Schiffrin 1987: chapter 9, on *I mean*) or Catalan (see Bach 1996, 2000a,b, 2001a,b). As for Spanish, Briz (2001), Casado Velarde (1991, 1996), Fuentes (1993, 1996: chapter 7, 1999), Portolés (1998: chapter 6) and Schwenter (1996) analyze several reformulation markers, especially colloquial ones.

compositional meaning ('I will say X a different way'). It also allows a certain degree of modification (*to say the same thing differently; to put the same thing a different way*).

The degree of modification increases in Spanish or Catalan markers such as *en otras palabras/en altres paraules* (lit. 'in other words'), which alternate with markers like Sp.: *en otros términos* 'in other terms', *con palabras más sencillas* 'with more simple words', *dicho en otras palabras* 'said in other words', *dicho en otros términos* 'said in other terms', *formulado en otros términos* 'formulated in other terms'; and Cat.: *amb unes altres paraules* 'with some other words', *en uns altres mots* 'in other words (synonym)', *dit en unes altres paraules* 'said in other words', etc.

- (11) Breument, assumirem una visió clara i sintètica de la relació entre els dos tipus de dimensions crucials que es poden discernir en una situació de parla o esdeveniment comunicatiu: la lingüística i l'extralingüística. **En altres paraules**, partim del concepte bàsic de *context de situació* [...] com a representació de l'entorn en forma de categories generals que són rellevants per al text [...]. (ORA, 41–42)

Briefly, we will assume a clear and synthetic vision of the relation between the two types of crucial dimensions that can be differentiated in a speech situation or communicative event: the linguistic one and the extralinguistic one. En altres paraules (lit.: 'in other words'), *we start from the basic concept of situational context as a representation of the environment by means of general categories which are relevant for the text.*

Thus, the basic components of prototypical complex markers can be substituted, and new elements can be added. The limit between simple and complex connectives is determined by the presence or absence of an active predicative structure and the degree of structural fixation (either complete or partial). However, there is an intermediate space occupied by markers such as Sp. *o lo que es lo mismo* or Eng. *to be more precise*, which are fixed or almost fixed, but will be grouped together with complex markers since they exhibit a complex clausal structure.⁶

Table 1 includes the form and frequency of the simple reformulation markers found in the selected corpus. The markers in the same row are structurally parallel and often identical or similar in a word-to-word translation. However, they are not to be considered as functionally equivalent.⁷

Simple markers correspond, on the one hand, to the disjunctive conjunction *or*, and, on the other hand, to parenthetical connectives, i.e. grammaticalized, fixed connectives which are syntactically detached elements, separated from the rest of the sentence by 'comma intonation' (see Cuenca, 1998, 2001a, 2002; Rouchota, 1998). The English parenthetical connectives which indicate reformulation are *that is*, i.e., *namely* and *in other words*.

⁶ The Spanish marker *o lo que es lo mismo* ('or which is the same') has a variant, *o lo que es peor* ('or, which is worse'), but the latter is not a reformulator.

⁷ The following tables include the markers found in the selected corpus (see references at the end of the paper), which are the most frequently used markers in academic written texts. The forms and frequency of use in the tables indicate tendencies of use which have been also tested in the extended corpus used for the research (see also Cuenca, 2001a).

Table 1
Simple reformulation markers

Spanish		Catalan		English	
Form	Freq	Form	Freq	Form	Freq
<i>o</i>	97	<i>o</i>	81	<i>or</i>	44
<i>es decir (que)</i>	41	<i>és a dir (que)</i>	30	<i>that is</i>	8
<i>o sea (que)</i>	9	<i>o sigui</i>	2		
<i>esto es</i>	30	<i>això és</i>	7	<i>i.e.</i>	26
				<i>namely</i>	2
				<i>in other words</i>	9
<i>a saber</i>	1				
Total	178		120		89

Table 2 shows the form and frequency of the complex reformulation markers found in the selected corpus.

Complex markers are structurally heterogeneous. They can be classified into three groups (set off by bold lines in Table 2):

- (i) variable prepositional phrases, such as Sp. *en otros términos* ('in other terms'),
- (ii) clauses, which can be either participial clauses like Cat. *dit d'una altra manera* ('said in a different way'), or finite-verb clauses, mainly conditional or final, such as Cat. *si es vol* ('if one wants') or Eng. *to be more precise*,
- (iii) predicative (subject-predicate) structures, like Eng. *this means that...*

It is worth noticing that the conjunction *or*, which is the general marker associated with reformulation, appears optionally [e.g., Sp.: (*o*) *en otros términos*; Cat.: (*o*) *dit d'una altra manera*] or obligatorily [e.g., Eng.: *or to say the same thing a different way*; Sp.: *o, si se quiere, o lo que es lo mismo*; Cat.: *o si es prefereix*, etc.] with most complex markers. This fact indicates that complex markers are less grammaticalized than simple ones, which do not combine with the conjunction *or*. The possibility of combining is a sign of an adjunct-like behavior and, thus, an indication that the predicative character of the marker is becoming more 'bleached' as the grammaticalization process goes on.

In spite of their structural differences, simple and complex markers are generally interchangeable with little semantic change and minor modifications in the syntactic structure, as we can see in (12) and (13).

- (12) a. Once again we are faced with a dichotomy of two extremes, and here too the answer lies, not in choosing which of the two conflicting alternatives to support, but in determining the point on the scale between them which is valid for the case in question. **In other words**, the extent to which a text is translatable varies with the *degree* to which it is embedded in its own specific culture [...]. (TRA, 41))
- b. ...in determining the point on the scale between them which is valid for the case in question. **To be more precise**, the extent to which a text is translatable. ...

Table 2
Complex reformulation markers

Spanish		Catalan		English	
Form	Freq	Form	Freq	Form	Freq
<i>en otras palabras</i>	1	<i>en altres paraules</i>	1		
<i>(o) en otros términos</i>	5	<i>en uns altres mots</i>	1		
<i>o, dicho en otras palabras</i>	1	<i>dit en unes altres paraules</i>	2		
<i>o, dicho en otros términos</i>	1	<i>dit amb altres paraules</i>	1		
<i>formulado en otros términos</i>	1				
<i>dicho de otro modo</i>	1	<i>dit d'una altra manera</i>	3		
		<i>altrament dit/dit altrament</i>	2		
<i>o, si se quiere</i>	2	<i>o, si es vol...</i>	3		
<i>o, si se prefiere</i>	1	<i>o si es prefereixen...</i>	1		
		<i>o si es desitja...</i>	1		
<i>o, lo que es lo mismo</i>	3	<i>o, el que és el mateix</i>	1		
<i>por decirlo más sencillamente</i>	1	<i>per dir-ho clar i ras</i>	1	<i>or to say the same thing a different way</i>	1
		<i>per dir-ho en paraules de...</i>	1	<i>to be more precise</i>	1
<i>quiere ello decir que</i>	2	<i>això vol dir que</i>	3	<i>this means that</i>	1
<i>quiero decir (con ello) que</i>	3				
Total	22		21		3

- (13) a Sperber y Wilson parten de la suposición de que los hablantes son, desde el punto de vista cognitivo, mecanismos eficientes de procesamiento de la información. **Esto quiere decir que** aspiran a rentabilizar al máximo los recursos cognitivos de que disponen en el curso de cualquier situación comunicativa en la que participan. (MAR, 100)

Sperber and Wilson start from the hypothesis that, from a cognitive point of view, speakers are efficient mechanisms for processing information. Esto quiere decir que ('this means that'; lit.: 'this wants to say that') *they aim at achieving the maximum benefit from the cognitive resources they have in the course of any communicative situation that they participate in.*

- b. ...mecanismos eficientes de procesamiento de la información. **Es decir** ('(that) is to say'), aspiran a...
...efficient mechanisms for processing information. **Es decir** ('(that) is to say'), *they aim at...*

Assuming a basic equivalence between simple and complex markers, my analysis will be restricted to the form and frequency of the markers. Differences in the meaning of the structures which include the reformulators are dealt with elsewhere (see Cuenca and Bach, in press).

4. Form-function mapping: grammatical commonalities across languages

If we consider the form of the markers in the three languages, it is possible to observe various commonalities. The basic markers are grammaticalized structures deriving from the equation ‘that (= A) is to say B’: Eng. *that is (to say)*, Sp. *es decir/esto es*, Cat. *és a dir/això és*.⁸ In English, the short version (*that is*) is more frequent than the complete expression *that is to say*. Spanish and Catalan also have two markers: one corresponding to the second part of the equation (Sp. *es decir*, Cat. *és a dir* ‘is to say’), based on the verb *to say*, and another one corresponding to the first part of the equation, based on the verb *to be* (Sp. *esto es*, Cat. *això és* ‘this is’). The latter is almost restricted to written texts, while the former is the most frequently used reformulation marker in formal texts (excluding the general conjunction *or*), and it is also used in informal communication along with Sp. *o sea*; Cat. *o sigui* (Schwenter, 1996).

On the other hand, all the markers identified derive from common lexical sources associated with the meaning of reformulation. Let us ‘re-formulate’ the definition of reformulation (Section 2) in order to identify its components. Re-formulating entails *saying* something which has been *previously said* (text deixis) in an *alternative way* (disjunction) with *different words* (paraphrase). The analysis and the classification of the markers indicating reformulation highlights the correspondences between the semantic and pragmatic features in italics and the form of the markers. The main constituents of the markers fall under the following groups:

(a) Verbs of speaking (14), whose meaning is directly related to the metatextual function of reformulation as an alternative expression of a previous utterance:

- (14) El polo semántico es la significación contextual de una expresión, **es decir**, la conceptualización detallada que constituye nuestra comprensión total de la expresión en contexto [...]. (GRA, 134)

The semantic pole is the contextual meaning of an expression, es decir (lit.: ‘is to say’), the detailed conceptualization that constitutes our global comprehension of the expression in context [...].

(b) Nouns such as *word*, which refer to the pragmatic function of reformulation as *re-wording*:

- (15) ¿Para que exista interferencia, se requiere que ésta se haya adaptado al sistema de la lengua interferida, desde la lengua llamada receptora?; **en otras palabras**, ¿el uso de una marca transcódica restringido a un individuo, a un grupo sociolingüístico o a situaciones de habla muy específicas impide que sea considerada como una interferencia? (PRAG, 300)

⁸ The variants with the general subordinator *que* (‘that’) of Sp.: *es decir*, *o sea* and Cat.: *és a dir* indicate the predicative origin of these fixed markers. As a matter of fact, the classification of the markers that is being presented corresponds to a cline from more grammaticalized to less grammaticalized structures, the former deriving from the latter (see Cuenca, 1998, 2001a: section 3).

*For interference to exist, is it necessary for it to have adapted to the system of the language that is the object of the interference from the so-called receptive language?; **en otras palabras** (lit.: ‘in other words’), does the use of a meta-linguistic marker restricted to an individual, a sociolinguistic group, or very specific speech situations prevent it from being considered as an interference?*

(c) Structures expressing equivalence ($A \approx B$) and deictic elements (16).

- (16) Psychologists are directly interested in the mental representation and processing of categories. To investigate these issues, they take as their primary data observations about human behavior; **that is**, the responses of subjects engaged in various types of categorization tasks. (COG, 150)

Interpreted literally (i.e., as if it was not grammaticalized), the deictic element (*that*) implies an anaphoric reference to the preceding utterance (A). So, *that* in *that is* derives from a text deictic item which has lost its deictic nature through grammaticalization.⁹

(d) The conjunction *or* (Sp./Cat. *o*), isolated (17a) or followed by an adjunct (17b).

- (17) a. ... els registres constitueixen conjunts de trets **o** tries lingüístiques (i paralingüístiques, de fet) determinades. (ORA, 34)
 ... registers are groups of features **o** (lit.: ‘or’) determined linguistic (and in fact, paralinguistic) choices.
- b. [...] it is purely coincidental that Leech and Short have adopted precisely the same terms in their study of style—**or more accurately**, it would be coincidental if they were not pointing out a very similar phenomenon as that discussed in Snell-Hornby 1983 [...] (TRA, 122)

As indicated before (Section 3), the conjunction *or* can also appear in combination with another marker (18a), and in Spanish and Catalan, it is sometimes integrated in a simple form (18b).

- (18) a. ¿Qué nos dice de su función discursiva la disposición discursiva de, en general, las subordinadas adverbiales llamadas impropias [...]? **O, dicho en otros términos**, ¿por qué algunas de estas subordinadas adverbiales tienden a anteponerse a la cláusula principal y por qué otras, en cambio, se posponen? (PRAG, 334)

⁹ Deictic elements are often used to create connectives by a three step process of grammaticalization: deictic > text deictic > connective. In fact, deictic elements seem to compensate the scarcity of grammatical connectives in early stages, and they become grammaticalized as connectives on their own or in phrases containing them (see Marín and Cuenca, 1998).

What does the discourse position of so-called improper adverbial subordinate clauses tell us about their discourse function [...]? **O, dicho en otros términos** (lit.: ‘or, said in other terms’), *why do some of these adverbial subordinate clauses tend to precede the main clause and why, instead, do others follow?*

- b. El resultat d’aquest procés històric és que la lingüística aplicada avui [...] cobreix totes aquelles àrees d’intersecció entre el llenguatge i altres disciplines, **o sigui**, tot el cos de coneixements que van més enllà del nucli de la lingüística «central» o tradicional. (PRO, 23)

The result of this historic process is that applied linguistics nowadays [...] covers all the interfaces between language and other disciplines, o sigui (lit.: ‘or be-subjunctive’), *all the knowledge that goes beyond the core of «central» or traditional linguistics.*

(e) The indefinite *other* (19), the adjective *different* or a verb such as *prefer*, *like* and so on (20), which foreground the idea of choice between alternative expressions.

- (19) a. Although cognitive linguistics anticipates the existence of markedness alignment, it merely provides a motivation for this phenomenon, rather than predicting its occurrence. **In other words**, markedness alignment must be understood as a possible, but not necessary option in language. (COG, 219)

- b. En principio, [el mecanismo de relevancia] se trata de un mecanismo endógeno, preinstalado genéticamente. Su funcionamiento no se limita únicamente a interesarse por las señales sensoriales más intensas o más peculiares, sino que obedece también al criterio de las expectativas generadas internamente por el propio sistema de procesamiento. **Formulado en otros términos**, los conocimientos almacenados en nuestra memoria no sólo nos permiten, por ejemplo, reconocer e identificar a un determinado animal como un rinoceronte, sino que también nos indican que la presencia del mismo en un zoo es perfectamente esperable [...]

(MAR, 97)

In principle, [the mechanism of relevance] is an endogenous mechanism, genetically preinstalled. Its function is not limited to an interest in the most intense or more peculiar sensitive signals, but it also satisfies the criterion of expectations internally generated by the processing system. Formulado en otros términos (lit.: ‘formulated in other terms’), *the knowledge stored in our memory does not only allow us, for instance, to recognize and identify a specific animal as a rhinoceros, but also indicates that its presence in a zoo is entirely to be expected [...]*

- (20) a. Tots aquests recursos lingüístics generen sovint una polifonia, més o menys irònica, típica de l’assaig. **O, si es vol**, de la conversa, amb la qual l’assaig guarda un parentiu soterrat que no deixa d’aparèixer en la superfície del discurs gràcies a trets d’oralitat i a estratègies de col·loqui íntim. (FUS, 93)

All these linguistic mechanisms often produce a more or less ironical polyphony, typical of the essay. O, si es vol (lit.: ‘if it is wanted-impersonal’), *[typical] of conversation, with which the essay shares a hidden kinship that inevitably reaches the surface of discourse by means of the features of orality and strategies of intimate colloquy.*

- b. La adecuación de la investigación al objeto posibilitará que la sintaxis de la lengua conversacional deje de describirse como la propia de una modalidad escasamente planificada y poco o mal organizada o vertebrada, esto es, menos elaborada, trabada y estructurada que la de la lengua culta formal o escrita. **O, si se prefiere**, más suelta, libre, fragmentada, quebrada o desmembrada, y a menudo torpemente configurada y en gran medida braquilógica o elíptica. (PRAG, 166)

The adaptation of the research to its object will make it possible for the syntax of conversation to be no longer described as a poorly planned and little or badly organized or constructed modality, that is, less elaborate, linked and structured than the modality of formal or written language. O, si se prefiere (lit.: 'if it is preferred-impersonal'), looser, freer, more fragmented, broken or disjointed, and often clumsily configured and to a great extent condensed or elliptic.

Summing up, the structural composition of the markers, which is highly similar in the three languages concerned, suggests that the selection of forms is directly related to their discourse function: the semantic and pragmatic features defining reformulation map onto the structure of the reformulation markers. This fact is consistent with some widespread hypotheses on the nature of grammar and grammaticalization: there is a direct relationship between discourse and syntax. As several scholars suggest (see Givón, 1979; Hopper, 1987, 1998; Hopper and Traugott, 1993, among others), grammaticalization is a process by which a discourse strategy becomes fixed and conventionalized. Following this line of reasoning, we can assume that reformulation markers derive from common lexical sources associated with the function that they convey, and all of them (except the conjunction *or*) are the result of encoding discourse strategies, which are common in the three languages considered. The similarity in the form and/or the structure of the markers helps explain the commonalities observed.

5. Grammatical differences across languages

Although the three languages have both simple fixed markers and complex markers, there are interesting differences in the form and frequency of the markers. Table 3 summarizes the information included in Tables 1 and 2.

5.1. Differences in the form of the markers

Regarding the form of the markers, the English texts include eight reformulation markers, while the Spanish and Catalan texts include 17 different forms (some of which also include variants, like *altrament dit/dit altrament*) (Fig. 2).

(i) The difference in the overall frequency of reformulators is based on the rate of complex markers: three markers in English (37.5%) compared with 12 markers in

Table 3
Reformulation markers: quantitative analysis

	Forms			Frequency		
	Spanish	Catalan	English	Spanish	Catalan	English
A. Conjunction <i>or</i>	1	1	1	97	81	44
B. Parenthetical connectives	4	3	4	81	39	45
Simple markers	5 (29.4%)	4 (23.5%)	5 (62.5%)	178 (89%)	120 (85.1%)	89 (96.7%)
C. Prepositional phrases	2	2	–	6	2	–
D. Clauses	8	10	2	11	16	2
E. Predicative structures	2	1	1	5	3	1
Complex markers	12 (70.6%)	13 (76.5%)	3 (37.5%)	22 (11%)	21 (14.9%)	3 (3.3%)
Total	17	17	8	200	141	92

Spanish (70.6%) and 13 markers in Catalan (76.5%).¹⁰ The encoding of markers based on nouns, the variation in verbal forms, and the optionality of complements and specifiers are common in the Romance languages, as opposed to English.

- nouns: Sp. *palabras* ('words'), *términos*, ('terms'); *manera, forma, modo* ('way')
 Cat. *paraules, mots* ('words'); *manera, forma* ('way'),
- verbs: Sp. *ser* ('to be'), *decir* ('to say'), *formular* ('to formulate'), *querer* ('to want'),
preferir ('to prefer'), *saber* ('to know')
 Cat. *ser* ('to be'), *dir* ('to say'), *voler* ('to want'), *preferir* ('to prefer'), *desitjar* ('to desire')

(ii) Written English uses extensively the abbreviation *i.e.* (Latin *id est* 'that is'), whereas no abbreviations are normally used in Spanish and Catalan. The abbreviation *i.e.* is the most frequently used reformulation marker (26 cases out of 89, 29.2%), excluding the general conjunction. The marker *i.e.* is the simplest and most grammaticalized marker in English. This is also the case if we compare it with all the Spanish and Catalan markers.

(iii) The English connective *in other words* is a fixed marker, while its Spanish and Catalan counterparts (Sp. *en otras palabras*, Cat. *en altres paraules*) are variable. The preposition can be substituted, the noun replaced by a synonym and the phrase expanded in different ways: Sp. *con otras palabras, dicho con otras palabras, formulado en otros términos, con palabras más precisas*, and Cat. *en/amb altres paraules, amb uns altres mots, en poques paraules*, and others. Thus, Sp. *en otras palabras* and Cat. *en altres paraules* are considered complex markers, in contrast with the fixed marker *in other words*, which has been grouped together with English simple markers. It is also

¹⁰ A previous study (Cuenca, 2001b) focusing on the identification of the forms in the extended corpus is consistent with the conclusions derived from the analysis of the selected corpus with just one exception. The number of complex markers in Catalan was lower than in Spanish. Thus, the intermediate position of Catalan was clearer in the extended corpus than in the works selected for the quantitative analysis, for that was the case also for complex markers.

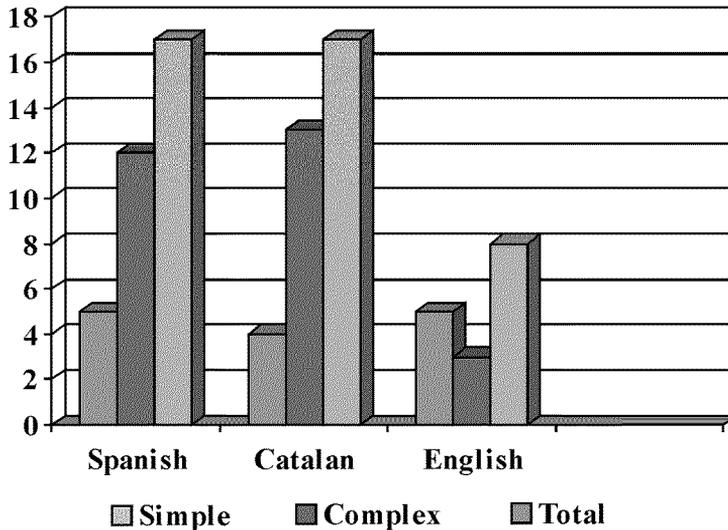


Fig. 2. Reformulation markers (forms).

worth noticing that Eng. *in other words* is the second most frequent specific reformulation marker (9 cases, 10.1%), being located between two major simple markers: *i.e.* (26 cases, 29.2%) and *that is* (8 cases, 9%). In contrast, Sp. *en otras palabras* (6 cases, 3% of the total) and Cat. *en altres paraules* (2 cases, 1.4%) and their variants are less used than *in other words*. This fact is consistent with the tendency exhibited by complex markers, which are less frequently used than simple ones. In addition to this, *in other words* does not combine with *or*, whereas the combination is possible in Spanish and Catalan, which further indicates a complex-like behavior of the Romance markers in contrast with a simple-like behavior of the English marker.

(iv) The predicative structures Sp. *quiero decir*, Cat. *vull dir* are less grammaticalized than their English counterpart *I mean*. *I mean* is a fixed structure which has become fully grammaticalized, and it is used as a parenthetical connective, just like all fixed markers (except the conjunction *or*). *I mean* is not used in formal writing and, consequently, it has not been found in the corpus. This English form is also used as a filler, like Sp. *o sea*, which similarly is a colloquial reformulation marker seldom used in formal discourse.¹¹ However, the fact that *o sea* and *o sigui* have been found in the corpus indicates that in Spanish and Catalan texts, variation is more important than adherence to the conventions of register, according to which *o sea*, and to a lesser extent *o sigui*, are associated with less formal texts.

In summary, the Spanish and the Catalan corpora include more markers than the English corpus does. English prefers simple fixed forms. Moreover, complex forms in

¹¹ As for Catalan, *vull dir* and *o sigui/siga* seem to exhibit this use, which has not been found in the corpus since it is typical of informal conversation.

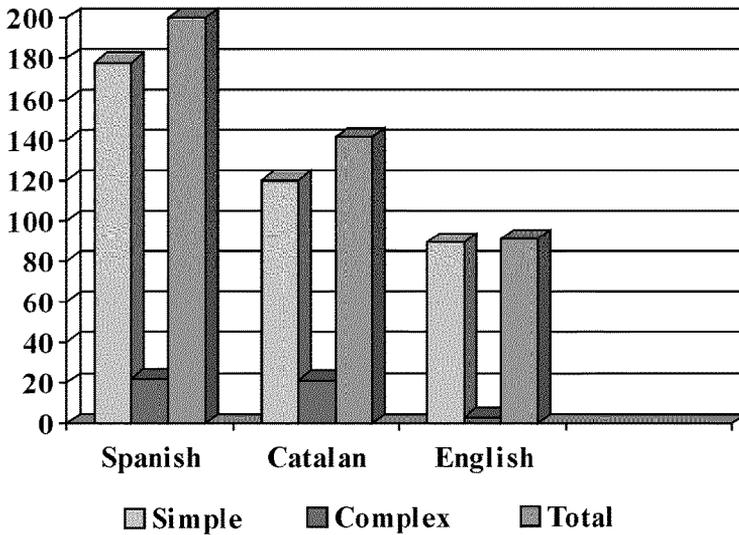


Fig. 3. Reformulation markers (frequency).

English tend to be fixed, or at least less variable than Spanish and Catalan complex forms. Some markers, which are equivalent in a word-to-word translation, have different degrees of fixation, the English being more fixed than their Romance counterparts.

5.2. Differences in the frequency of the markers

As to frequency of use, Spanish exhibits higher scores (200) than do both Catalan (141) and English (92). This result clearly indicates that Spanish and Catalan academic writers reformulate more often than English writers (Fig. 3).

- (i) In all three languages, simple fixed markers are more frequently used (Sp.: 89%; Cat.: 85.1%; Eng.: 96.7%) than complex ones (Sp.: 11%; Cat.: 14.9%; Eng.: 3.3%). Still, the differences are greater in English.
- (ii) The conjunction *or* is the most frequently used reformulation marker in the three languages.¹² The order is, as before, Spanish (97 examples; 54.5% out of

¹² The specific meaning of the conjunction *or* has not been always easy to establish. Being a general (or polysemous) disjunctive marker, the context determines the specific meaning expressed. Still, sometimes its context does not allow a clear determination of meaning. Thus, the cases of *or* with a clear reformulation meaning have been distinguished from the cases in which reformulation is not so clear. The results are the following:

<i>Or</i>	Spanish	Catalan	English
Reformulative (prototypical)	75	64	23
Reformulative (ambiguous)	22	17	21
Total	97	81	44

- the fixed markers and 48.5% of the total), Catalan (81 examples; 67.5% out of the fixed markers and 57.4% of the total) and English (44 examples; 49.4% out of the fixed markers and 48.4% of the total).
- (iii) The most frequently used parenthetical markers in Spanish and Catalan are Sp. *es decir* and Cat. *és a dir* (lit.: 'is to say'). However, the most frequently used English marker is not their verbatim translation, *that is (to say)*, but the abbreviation *i.e.* The second most frequent parenthetical markers are *esto es* in Spanish (30 examples out of 81 parenthetical connectives, 37%), *això és* in Catalan (7 examples out of 39 parenthetical connectives, 17.9%) and *in other words* in English (9 examples out of 45 parenthetical connectives, 20%).
- (iv) Spanish and Catalan include the variable prepositional phrase Sp. *en otras palabras*, Cat. *en altres paraules*, literally corresponding to the fixed English prepositional phrase *in other words*. The Spanish and Catalan variable markers corresponding to prepositional phrases are less used than the English fixed one: Sp. *en otras palabras*, six tokens out of 200 examples (3%) and Cat. *en altres paraules*, two examples out of 141 (1.4%), in contrast with Eng. *in other words*, nine tokens out of 92 (9.8%). The results are consistent with the fact that fixed simple markers are more frequently used than complex ones, and it gives further reasons to classify *in other words* along with simple markers.
- (v) The most frequent Catalan complex markers are clauses (16 examples out of 21, 76.2%). Half of the total are participial clauses (*dit en unes altres paraules*, *dit amb altres paraules*, *dit d'una altra manera*, *altrament dit/dit altrament*), while the rest are conditional clauses (5 examples), final clauses (2 examples), and a relative clause, the latter borrowed from Spanish (*o, el que és el mateix*).¹³ Spanish clauses (11 cases, which are 50% of the examples of complex markers), are participial (4 examples), relative (3 examples), conditional (3 examples), and final (1 example). As for English, the only two cases of clauses are final (*to be more precise*, *to say the same thing a different way*).
- (vi) Predicative structures are more frequent in Spanish (5 examples out of 22 complex markers, 22.7%) than in Catalan (3 examples out of 21 complex markers, 14.3%). Since the English corpus includes only three complex markers, each used once, the single example found in English is not significant. In relation to the total number of markers, predicative structures represent 2.5% in Spanish, 2.1% in Catalan and 1.1% in English.

In conclusion, the differences observed in the three languages regarding the number of forms and their frequency of use can be interpreted as manifestations of one common principle: English academic prose tends to prefer grammatical markers (i.e., short fixed forms), whereas formal Catalan and Spanish include a larger number of complex markers.

¹³ The high frequency of clauses in Catalan explains why it exhibits more complex forms than Spanish. As stated before (footnote 10), the extended corpus Catalan includes a lower amount of complex markers than does Spanish (see Cuenca, 2001b).

6. Rhetorical differences and the co-operation principle

The cross-linguistic differences observed in the amount and frequency of reformulation markers can easily be related to the fact that Spanish academic prose is less concise (more ‘wordy’) than English academic prose. In this sense, Catalan occupies an intermediate stage, its expository prose being less concise than English prose and more concise than Spanish (Cuenca, 2000).

As for English, some authors observe a tendency to synthetic expression and linearity, which does not coincide with the classic formal model in other languages, such as Spanish or German, which are more analytic and less linear. The existence of two major styles in academic writing was first proposed by Kaplan in his seminal study on Contrastive Rhetoric (Kaplan, 1966). Kaplan distinguished two styles: *writer-responsible style* and *reader-responsible style* (see also Kaplan, 1987, 1988; Hinds, 1987). Clyne (1994: § 6.5) has expanded this theory and has discussed the distinction between *formal-oriented cultures* and *content-oriented cultures*.¹⁴ The main characteristics of the two styles, which represent the opposite poles of a scale, are summarized in Table 4.

Assuming Clyne’s culture-bound approach to Grice’s Co-operation Principle, some considerations can be made:

- (a) The concept of co-operation at the informative level varies from one culture to another. In formal-oriented cultures, the writer has the responsibility of making his/her text easy to understand, which roughly means being synthetic and linear. In content-oriented cultures, the main concern is the amount of knowledge. Providing extensive knowledge is positively evaluated as a sign of academic authority, and the reader is made responsible for the interpretation of the text.
- (b) As a consequence, the notion of relevance is also culturally dependent. According to Clyne (1994: 193), relevance is understood in a restrictive sense in Anglo-Saxon culture, and it is associated with linearity. Digressions must be avoided, since the author does not need to prove his/her authority by providing a huge amount of information.
- (c) Similarly, direct, perspicuous expression is an outstanding feature in English academic writing. Direct expression is associated with short sentences and repetition. Conversely, in other cultures complexity of expression is related with authority because it is often interpreted as complexity in reasoning. Complexity is syntactically implemented by long complex sentences, which integrate information while avoiding repetition. In Spanish and Catalan repetition of lexical elements is avoided, whereas *variatio* is considered a sign of formal style.
- (d) The above features are related to a different conception of the social dimension of academic communication: public (community controlled) and

¹⁴ Clyne illustrates the behavior of a content-oriented culture mainly with German examples. The features defining German are roughly shared by Romance languages such as Spanish, and to a lesser extent Catalan (cf. Cuenca, 2000). Clyne’s statements about Chilean Spanish essays from an English-culture point of view are similar to those expressed for German: “The essays of the Chileans are more abstract, digressive, and content-oriented, exhibiting more discourse subordination. . .” (Clyne, 1994: 173).

Table 4
Two models of academic writing

	Formal-oriented cultures	Content-oriented cultures
<i>Focus of responsibility</i>	Writer	Reader
<i>Main concern</i>	How knowledge is transmitted	Amount of knowledge
<i>Extensive knowledge</i>	Negatively evaluated	Positively evaluated
<i>Notion of relevance</i>	Restrictive Digression is avoided	Non-restrictive Digression is allowed
<i>Text development</i>	Deductive Linear Symmetric	Inductive Not necessarily linear Not necessarily symmetric
<i>Manner of expression</i>	Direct Perspicuous Concrete	Not necessarily direct Complex General
<i>Syntax</i>	Short sentences Repetition of pronouns and lexical items	Complex sentences Avoidance of lexical repetition
<i>Social dimension</i>	Public (community controlled) Empirically based	Individual Interactive

empirically-based in Anglo-Saxon culture vs. individual and interactive in other contexts such as German or Spanish (see Scollon and Scollon, 1995).

In conclusion, what can be regarded as being too informative, non-relevant, wordy and obscure in one cultural context, is interpreted as a sign of being an intelligent authority in another cultural context.

These differences in style are parallel to the differences in the form and frequency of the markers that have been pointed out in the previous section. Reformulation structures like the ones in (21) and (22) are possible in Spanish, but their literal translation into English would be considered unnecessarily complex, wordy and, as a consequence, odd.

- (21) Ahora bien, además de constituir un mecanismo de corrección por parte del hablante, estas cláusulas con *si* pospuestas y entonativamente independientes son usadas con fines comunicativos durante el proceso de negociación conversacional; **esto es, y formulado en otros términos**, podemos sistematizar unos contextos comunicativos en los que los hablantes tienden a utilizar dichas construcciones; en concreto, cuando un hablante intenta obtener algún tipo de respuesta de su interlocutor y está teniendo problemas para conseguirlo. (PRAG, 339)

However, in addition to being a mechanism of correction by the speaker, these if-clauses, which are post-posed and intonation-wise independent, are used for communicative ends during the process of negotiation in conversation; esto es, y formulado en otros términos ('that is, and formulated in other terms'), we can systematize some communicative contexts in which the speakers tend to use these constructions; specifically, when a speaker is trying to achieve some kind of response from his/her addressee and finds this difficult to achieve.

- b. No se trata, pues, de una desviación del “origo” o del uso “recto” del pretérito imperfecto de indicativo, sino de una manera particular, subjetiva, contextualmente adecuada y común en la lengua coloquial, como decíamos, de orientar el mensaje desde el “ego” enunciador, y sólo por referencia a él puede ser el mensaje interpretado.

Quiero decir-por decirlo más sencillamente- que si contamos con que las tres dimensiones enunciativas (personal-espacial-temporal) son ‘reales’ (universales, inevitables) y con que la lengua (supuestamente todas las lenguas) habilita instrumentos para expresarlas (pronombres, tiempos verbales, adverbios), si contamos con esto—decía—, la posición del hablante respecto a tales expresiones no puede ser más que ‘egocéntrica’ cuando las usa, pues sólo él habla y sólo desde su punto de vista (aunque coloque el foco, su foco, en diversas posiciones). (PRAG, 260) *It is not then a deviation from the “origo” or from the “proper” use of the preterite indicative, but a particular way, subjective, contextually adequate and common in the colloquial language, as we said before, to orientate the message starting from the enunciator “ego”; and only with reference to this can the message be interpreted.*

Quiero decir-por decirlo más sencillamente- que (*I mean, to say it more simply, that’; lit.: ‘I want to say-to say it more simply- that’*) if we take the three enunciative dimensions (personal-spatial-temporal) to be ‘real’ (universal, inevitable) and we hold that language (presumably any language) activates instruments to express them (pronouns, tenses, adverbs), if we consider this—as I was saying—the position of the speaker regarding these expressions can only be “egocentric” when he uses them, since it is only him who is speaking and only from his point of view (even if he puts the focus, his focus, in different positions).

Example (21) includes a fixed marker (*esto es* ‘that is’) coordinated with a complex variable marker (*formulado en otros términos* ‘formulated in other terms’). Two complex markers appear in (22): a predicative structure (*quiero decir*, ‘I mean’, lit. ‘I want to say’) combined with a final clause (*por decirlo más sencillamente*, ‘to say it more simply’). The two fragments in (21) and (22) also exemplify the content-oriented rhetoric referred to by Clyne and other scholars.

Catalan represents an intermediate case between Spanish and English, tending to avoid complex structures such as those in (21) and (22); but some of its markers are more complex than their English counterparts (23).¹⁵

- (23) Una de les propietats més definitòries té a veure amb el fet que el canvi es produeix en contextos sintàctics molt locals. **Per dir-ho clar i ras**: allò que es gramaticalitza no és un lexema o una construcció, sinó un lexema o una construcció en un context oracional molt concret. (CLUB, 140)

One of the most defining properties has to do with the fact that the change is produced in very local syntactic contexts. Per dir-ho clar i ras (‘to say it clearly and plainly’): *what is grammaticalized is not a lexeme or a construction, but a lexeme or a construction in a very specific sentential context.*

¹⁵ The only similar marker that has been found in the complete English corpus is *to say the same thing a different way* [see example (10) above].

On the other hand, Spanish writers reformulate more than the English in academic texts. This feature is related to the opposition between digressiveness and linearity, as some reformulations can introduce digressive material and break linearity. Catalan writers once more show an intermediate behavior.

These conclusions are parallel to the ones presented by Fernández Polo (1999: chapter 6), who has compared the use of connectives in English and Spanish popular science texts and their translations from English into Spanish. His main conclusions are the following:

- (i) Spanish exhibits a higher amount of forms due to the variability and complexity of the markers that are available.
- (ii) English authors tend to select precise and unambiguous connectives, while Spanish authors and translators do not feel that they have to avoid polysemous connectives.
- (iii) In general terms, text connectives are more frequent in English than in Spanish texts. However, it must be observed that reformulation connectives show the opposite tendency; Spanish reformulators occur 50% times more often than English reformulation connectives.

These features are considered by Fernández Polo (1999) to be manifestations of English explicit rhetoric (extensive use of simple and unambiguous connectives), as opposed to Spanish implicit rhetoric.

Points (i) and (iii) have already been dealt with in my analysis. In the line of conclusion (ii), it must be borne in mind that *or*, which is the only polysemous reformulation marker, is far more used in Spanish (97 cases) and Catalan (81 cases) than in English (44 cases).¹⁶ The same trend is observed with other parameters, with Catalan located in an intermediate position between Spanish and English, but nearer to the former.

Now, if we relate the differences among markers in Spanish, Catalan, and English (level of grammar) with the two styles of building formal texts just described (level of discourse), it is possible to hypothesize a more or less direct relationship. Spanish and Catalan use a wider variety of forms to indicate the same discursive function, but variety is related to structural variability and complexity. At the level of discourse, this distinctive feature has two implications:

- (i) complex markers include more information about the precise meaning that the writer or speaker wants to convey;
- (ii) complex markers allow a higher degree of *variatio*, since the choice is greater.

¹⁶ The tendency is more evident if we just consider the cases of the clear reformulative *or* (see footnote 12): Spanish (75 cases), Catalan (64 cases), English (23 cases).

At the level of grammar, many markers in Spanish and Catalan are complex in structure and not fixed. The markers in these languages are more variable, because they are not completely grammaticalized or not grammaticalized at all.

All these features are consistent with a content-oriented rhetoric, where *variatio* in lexical choices and structures is positively evaluated, while strict repetition is avoided.¹⁷ In contrast, English exhibits a shorter list of markers, most of which are structurally fixed; there is little concern about repeating the same form, and writers avoid any kind of ‘superfluous’ information in order to preserve discourse economy.

7. Conclusion

A cross-linguistic analysis of the reformulation markers found in academic texts in English, Spanish and Catalan shows remarkable similarities in the strategies leading to the creation of markers from lexical sources. However, these similarities also uncover significant differences regarding the variety of markers.

My claim is that the selection and use of markers expressing reformulation are not simply a matter of different grammar, but also of rhetorical strategies.¹⁸ Assuming that the process leading towards the creation of many connectives has its roots in discourse, the analysis of reformulation markers supports the hypothesis that certain differences in grammar and in discourse construction are related. The tendency of English formal style towards synthetic, linear and simple forms in the overall construction of the text mirrors a tendency towards a more extensive use of grammatically simple markers, which in turn decreases the level of verbosity. In contrast, Spanish, focusing on content and *variatio*, favors the use of a higher amount of complex variable markers. Catalan can be grouped together with Spanish, but the frequency of use of the markers and the rhetorical style in academic text is intermediate with respect to Spanish and English.

The hypothesis of a bridge connecting grammar and discourse is consistent with Clyne’s conclusion that “universally intended rules for successful communication, such as Grice’s Cooperative Principle, need to be sensitive to cultural variation” (Clyne, 1994: 201). In other words, cultural variation can be reflected in some rhetorical strategies to build expository texts and also in the forms which express discourse functions such as reformulation.

¹⁷ Nonetheless, it must be noticed that the tendency is not so strong in Catalan. This model is also changing in Spanish, at least in some fields. The use of long, complex sentences is beginning to be associated with old-fashioned styles, just as happened in English some decades ago. The increasing influence of English academic writing and mass-media style, as well as some changes in the social consideration of academics, help to explain this change at the rhetorical level.

¹⁸ This is also true of other discourse functions such as exemplification (see Cuenca, 2001b).

Acknowledgements

This research was funded by Project GV98-09-113 and Research Group LINK, GV-2000-202 (Conselleria de Cultura, Educació i Ciència, Generalitat Valenciana, Spain). The initial research on the subject was done while I was a visiting scholar at Stanford University (grant PR98 0043500085, Ministerio de Educación y Cultura). I wish to thank Elizabeth Traugott for her guidance and comments on this paper, Joseph Hilferty, Dominic Keown and Javier Valenzuela for their proofing and Jacob Mey, Max Wheeler and two anonymous reviewers for their suggestions.

References

- Aske, Jon, 1989. Path predicates in English and Spanish: a closer look. *Berkeley Linguistic Society* 15, 1–14.
- Bach, Carme, 1996. Reformular: ¿una operación argumentativa aséptica? Estudio del conector de reformulación parafrástica *és a dir*. *Sendebarr* 7, 255–271.
- Bach, Carme, 2000a. De la parafrasi a la invalidació. Els connectors reformulatius: punts de confluència i divergència. In: Englebert, A., Pierrad, M., Rosier, L., Raemdonck, D. (Eds.), *Actes du XXII Congrès International de Linguistique et Philologie Romanes*. Tübingen, Niemeyer, pp. 31–39.
- Bach, Carme, 2000b. Mecanismos de reformulación parafrástica del catalán. Estudio de los conectores reformulativos *és a dir* (*es decir*), *més ben dit/millor dit* (*mejor dicho*) y *dit d'una altra manera* (*dicho de otro modo*). In: Javier Ruiz de Mendoza, Francisco (Ed.), *Panorama actual de la Lingüística Aplicada*. Conocimiento, procesamiento y uso del lenguaje. Logroño, Universidad de la Rioja, pp. 41–51.
- Bach, Carme, 2001a. Els connectors reformulatius catalans: anàlisi i proposta d'aplicació lexicogràfica. PhD dissertation, Universitat Pompeu Fabra, Barcelona.
- Bach, Carme, 2001b. Coherencia tipològica en los conectores reformulativos del catalán. In: Bustos Tovar, J.J., Charedeau, P. (Eds.), *Lengua, discurso, texto* (I Simposio International de Anàlisis del Discursu). Madrid, Visor, pp. 523–538.
- Ball, W.J., 1986. *Dictionary of Link Words in English Discourse*. Macmillan, London.
- Blakemore, Diane, 1993. The relevance of reformulations. *Language and Literature* 2, 101–120.
- Briz, Antonio, 2001. El uso de *o sea* en la conversación. In: De Kock, J. (Ed.), *Lingüística con Corpus*. Catorce aplicaciones sobre el español. Ediciones de la Universidad de Salamanca, Salamanca, pp. 287–318.
- Cabré, M. Teresa, 1995. Les relacions parafràstiques. In: Artigas, Rosa (Ed.), *El significat textual*. Generalitat de Catalunya, Barcelona, pp. 73–81.
- Casado Velarde, Manuel, 1991. Los operadores discursivos *es decir*, *esto es*, *o sea* y *a saber* en español actual: valores de lengua y funciones textuales. *Lingüística Española Actual* 13, 87–116.
- Casado Velarde, Manuel, 1996. Nota sobre la historia de los marcadores textuales de explicación *es decir* y *o sea*. In: Casado Velarde, M. et al. (Eds.), *Scripta Philologica in Memoriam Manuel Taboada Cid*, Vol. I. Universidade da Coruña, A Coruña, pp. 321–328.
- Clyne, Michael, 1994. *Inter-cultural Communication at Work*. Cultural Values in Discourse. Cambridge University Press, Cambridge.
- Cuenca, M. Josep, 1998. Sobre la interrelació del lèxic i la gramàtica: el concepte de connexió lèxica. In: Cifuentes, José Luis (Ed.), *Estudios de Lingüística Cognitiva*. Universidad de Alicante, Alicante, pp. 507–526.
- Cuenca, M. Josep, 2000. Estudi estilístic i contrastiu de l'arquitectura de l'oració. *Caplletra* 26, 105–120.
- Cuenca, M. Josep, 2001a. Los conectores parentéticos como categoría gramatical. *Lingüística Española Actual* XXIII (2), 211–235.

- Cuenca, M. Josep, 2001b. Anàlisi contrastiva dels marcadors de reformulació i exemplificació. *Caplletra* 30, 47–72.
- Cuenca, M. Josep, 2002. Els connectors i les interjeccions. In: Solà, Joan et al. (Eds.), *Gramàtica del Català Contemporani*, Vol. Sintaxi. Empúries, Barcelona. (Chapter 31).
- Cuenca, M. Josep, Bach, Carme. Contrasting the form and use of reformulation markers (in press).
- Fernández Polo, Francisco Javier, 1999. Traducción y retórica contrastiva. A propósito de la traducción de textos de divulgación científica del inglés al español. Santiago de Compostela: Universidade de Santiago de Compostela. Anexo de *Moenia* 6.
- Fuchs, Cathérine, 1982. La paraphrase. Presse Universitaire Française, Paris.
- Fuentes Rodríguez, Catalina, 1993. Conclusivos y reformulativos. *Verba* 20, 171–198.
- Fuentes Rodríguez, Catalina, 1996. La sintaxis de los relacionantes supraoracionales. Arco Libros, Madrid.
- Fuentes Rodríguez, Catalina, 1999. *Vamos*, un conector coloquial de gran complejidad. In: Martín Zorraqüino, M. Antonia, Montolío Durán, Estrella (Eds.), *Los marcadores del discurso. Teoría y Análisis*. Arco Libros, Madrid, pp. 177–192.
- Givón, Talmy, 1979. *On Understanding Grammar*. Academic Press, New York.
- Gülich, Elisabeth, Kotschi, Thomas, 1983. Les marqueurs de reformulation paraphrastique. *Cahiers de Linguistique Française* 5, 305–351.
- Gülich, Elisabeth, Kotschi, Thomas, 1987. Les actes de reformulation paraphrastique dans la consultation *La dame de Caluire*. In: Bange, P. (Ed.), *L'analyse des interactions verbales. La dame de Caluire une Consultation*. P. Lang, Berne, pp. 15–81.
- Gülich, Elisabeth, Kotschi, Thomas, 1995. Discourse production in oral communication. In: Quasthoff, U.M. (Ed.), *Aspects of Oral Communication*. Walter de Gruyter, Berlin/New York, pp. 30–66.
- Hinds, John, 1987. Reader versus writer responsibility: a new typology. In: Ulla Connor, Kaplan, Robert, B. (Eds.), *Writing Across Languages: Analyses of L2 Text*. Addison Wesley, Reading, MA, pp. 141–152.
- Hopper, Paul, 1987. Emergent grammar. *Berkeley Linguistic Society* 13, 139–157.
- Hopper, Paul, 1998. Emergent grammar. In: Tomasello, Michael (Ed.), *The New Psychology of Language: Cognitive and Functional Approaches to Language Structure*. Lawrence Erlbaum, Mahwah, NJ, pp. 155–175.
- Hopper, Paul, Traugott, Elizabeth C., 1993. *Grammaticalization*. Cambridge University Press, Cambridge.
- Kaplan, Robert B., 1966. Cultural thought patterns in intercultural education. *Language Learning* 16, 1–20.
- Kaplan, Robert B., 1987. Cultural thought patterns revisited. In: Ulla Connor, Kaplan, Robert, B. (Eds.), *Writing Across Languages: Analyses of L2 text*. Addison Wesley, Reading, MA, pp. 9–22.
- Kaplan, Robert B., 1988. Contrastive rhetoric and second language learning: Notes toward a theory of contrastive rhetoric. In: Purves, Alan C. (Ed.), *Writing Across Languages and Cultures. Issues in Contrastive Rhetoric*. Sage, Newbury Park, pp. 275–304.
- Marín, M. Josep, Cuenca, M. Josep, 1998. La gramaticalització en els connectors: de l'oral a l'escrit. Actes del XIè Col·loqui Internacional de Llengua i Literatura Catalanes (Palma, 8–12 de setembre de 1997), 383–401. Publicacions de l'Abadia de Montserrat, Barcelona.
- Portolés, José, 1998. *Marcadores del discurso*. Ariel, Barcelona.
- Rossari, Corinne, 1994. *Les opérations de reformulation*. Peter Lang, Berne.
- Rouchota, Villy, 1998. Procedural meaning and parenthetical discourse markers. In: Jucker, Andreas H., Ziv, Yael (Eds.), *Discourse Markers. Descriptions and Theory*. John Benjamins, Amsterdam/Philadelphia, pp. 97–126.
- Schiffrin, Deborah, 1987. *Discourse Markers*. Cambridge University Press, Cambridge.
- Schwenter, Scott, 1996. Some reflections on *o sea*, a discourse marker in Spanish. *Journal of Pragmatics* 25, 855–874.
- Scollon, Ron, Scollon, Suzanne Wong, 1995. *Intercultural Communication*. Blackwell, Oxford/Cambridge, MA.
- Sebastian, E., Slobin, Dan I., 1994. Development of linguistic forms, Spanish. In: Berman, Ruth A., Slobin, Dan I. (Eds.), *Relating Events in Narrative: A Crosslinguistic Developmental Study*. Erlbaum, Hillsdale, NJ, pp. 239–284.

- Slobin, Dan I., 1996. Two ways to travel, verbs of motion in English and Spanish. In: Masayoshi Shibatani, Thompson, Sandra, A. (Eds.), *Grammatical Constructions. Their Form and Meaning*. Oxford University Press, Oxford, pp. 195–219.
- Talmy, Leonard, 1985. Lexicalization patterns, semantic structure in lexical forms. In: Shopen, Timothy (Ed.), *Language Typology and Syntactic Description*, Vol. 3. Cambridge University Press, Cambridge, pp. 36–149.
- Talmy, Leonard, 1991. Path to realization, a typology of event conflation. *Berkeley Linguistic Society* 7, 480–519.
- Ungerer, Friedrich, Schmid, Hans-Jörg, 1996. *An Introduction to Cognitive Linguistics*. Longman, London/New York.

*Corpus references*¹⁹

1. English

- *Casad, Eugene (Ed.), 1995. *Cognitive Linguistics in the Redwoods*. Mouton de Gruyter, Berlin (COG).
- Cognitive Linguistics 8.1. Mouton de Gruyter, 1997 (CL).
- Goldberg, Adele E., 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. The University of Chicago Press, Chicago (CON).
- Lakoff, Robin, 1989. The way we were; or; the real actual truth about Generative Semantics. A memoir. *Journal of Pragmatics* 13, 939–988. (WAY).
- Mann, William C. Thompson, Sandra A. (Eds.), 1992. *Discourse Description. Diverse Linguistic Analyses of a Fund-Raising Text*. John Benjamins, Amsterdam (DIS).
- Snell-Hornby, Mary, 1988. *Translation Studies. An Integrated Approach*. John Benjamins, Amsterdam (TRA).

2. Spanish

- *Briz, Antonio et al. (Eds.), 1997. *Pragmática y gramática del español hablado*. València: Universitat de València/Pòrtico (PRAG).
- Carreiras, Manuel, 1997. *Descubriendo y procesando el lenguaje*. Trotta, Madrid (DES).
- Cifuentes, José Luis, 1994. *Gramática cognitiva. Fundamentos críticos*. Eudema, Madrid (GRA).
- Martín Zorraquino, M. Antonia, Montolio Durán, Estrella (Eds.), 1999. *Los marcadores del discurso. Teoría y Análisis*. Madrid, Arco Libros (MAR).
- Textos de didáctica de la lengua y de la literatura 7. Graó, Barcelona, 1996 (TEX7).

3. Catalan

- Articles de didáctica de la llengua i de la literatura 5. Graó, Barcelona, 1995 (ART).
- Estudis de llengua i literatura catalanes/XXXV. Homenatge a Arthur Terry 1. Publicacions de l'Abadia de Montserrat, Barcelona, 1997 (EST).
- *Lorente, Mercè et al. (Eds.), 2001. *La gramàtica i la semàntica per a l'estudi de la variació*. Barcelona: PPU-Secció de Lingüística Catalana de la Universitat de Barcelona (CLUB).
- Payrató, Lluís, 1997. *De professió, lingüista*. Empúries, Barcelona (PRO).
- *Payrató, Lluís (Ed.), 1998. *Orament. Estudis de variació funcional*. Publicacions de l'Abadia de Montserrat, Barcelona (ORA).
- Salvador, Vicent, 1994. *Fuster o l'estratègia del centaure*. Bullent, València (FUS).

¹⁹ The star (*) identifies the references used for the quantitative analysis. The other references, and also Ball's *Dictionary* (1986), have been taken into account for the overall analysis and exemplification (see Cuenca, 2001b).

Maria Josep Cuenca is a Professor of Catalan Linguistics at the University of Valencia (Spain). She has published several books and papers on compound sentences and connectives, among other subjects related with the interface between syntax and discourse. Her recent research focuses on the application of Cognitive Linguistics and Grammaticalization Theory to the contrastive analysis of discourse markers such as tag questions, as well as different types of connectives and interjections.