The expression of deonticity in written and oral samples from the BNC (British National Corpus) and CREA (Corpus de Referencia del Español Actual): a contrastive view and implications for context-based teaching

Silvia Molina Plaza
Universidad de Castilla-La Mancha

Abstract
Corpus evidence has proven that expressions of modality are pervasive in present day English. After a brief theoretical introduction about modality in both languages and comparing how the latter is expressed in English and Spanish, we shall focus on examples of deontic modality from a semantic and pragmatic point of view. All the examples come from the BNC (British National Corpus) and CREA (Corpus de Referencia del Español Actual) and involve language and potential action. When speakers/writers order, promise or place an obligation on someone, they usually exploit linguistic forms such as directives, verbs of volition -including promises and threats- such as wish, punish, and modal verbs. These meanings are usually expressed with the same structures in Spanish but there are some differences. Attention will be paid to the following two issues, namely (a) Which modals are rising in both languages?. (b) Is written language being affected by colloquialization in the use of the modals? The paper ends up advocating a context-based teaching of English deontic modals for Spanish students with practical suggestions for teachers.

Keywords: deontic modality, semantic, pragmatic, Spanish, English, CREA, British National Corpus.

1. Introduction
Different theoretical models have been adopted in studies of modality in present day English (Coates 1983; Haegeman 1983; Perkins 1983; Sweetser 1982). Linguistic features which express modality occur at different levels of language: individual lexical items, illocutionary forces and propositions. Examples abound that show how such meanings are encoded in lexis, in the verbal group, in modal verbs and in logical and pragmatic connectors in English and Spanish. A major problem among most linguists has been that of reconciling several dimensions; namely, 1) a semantic classification of the modal auxiliaries under such notions as necessity, permission, various degrees of possibility, etc. 2) the fact that even with such a classification indeterminacy arises (Palmer 1990:197-200); 3) the relationship of the modal auxiliaries proper to other ‘quasi-modals’ such as have to, be able to and also to other carriers of modal expressions such as adverbs (undoubtedly) and adjectives; 4) the pragmatic features of modal verbs, whose conditions on selection are imposed by contextualization (Lakoff 1972:233-234) i.e permission; 5) a realistic account of

---

1 This paper reports on on-going research as part of a major project on modality and evidentiality (BFF 2000-0699-C02-02).  
2 Coates (1983:17) gives an example of this indeterminacy with ‘ought to’ in the following exchange:  
   A. Newcastle Brown is a jolly good beer.
   B. Is it?
   A. Well it ought to be at that price

Ought here either indicates obligation or the speaker’s logical assumption.

---
the distribution of modal auxiliaries according to stylistic parameters: to express irony, tact, condescension (Leech 1971:67).

The term modality will mean in this paper the ways in which ‘language is used to encode meanings such as degrees of certainty and commitment, or alternatively vagueness and lack of commitment, personal beliefs versus generally accepted or taken for granted knowledge. Such language functions to express group membership, as speakers adopt positions, express agreement and disagreement with others, make personal and social allegiances and contracts’ (Stubbs 1996:202).

My aim will be to study examples of deontic modality from written and corpora evidence in English and Spanish in order to check which modals are more frequent and how they function in their context from a semantic and pragmatic point of view. Comparing how deontic modality is expressed in real examples will allow us a better grasp of the similarities and differences and devise materials which are based on this better insight using real examples. English and Spanish manifest similarities in the use of modals at a more abstract level of description (e.g. functional paradigms), while at a lower, more concrete level of description (e.g. lexico-grammatical), they may use diverse structural devices to achieve the same function, for example, modalized statements. Deontic modality will refer to ‘the necessity or possibility of certain acts carried out by morally responsible agents’ (Lyons 1977:823). Some authors (Coates 1983:20-21) prefer to use the term ‘Root’ to refer to non-epistemic modal but it is a more general category. My comments apply to the ‘common’ core of English and Spanish and no reference is made to particular dialects.

I start by offering a general outlook of current studies about modality, focusing later on deontic modality. The linguistic tradition has often identified modality with the meaning of syntactically or morphologically defined ‘modal’ expressions (e.g. modal auxiliaries). Modality in this sense refers to the meaning of the modals (cfr. Palmer 1990). Modality in English and Spanish sentences is usually divided in two general types: epistemic and deontic. The term epistemic is related to the Greek word epistemology and deontic derives from deontology, which refers to ‘the science of duty’. Both types of modality go beyond the simple proposition. Deontic modality, for example, involves language and potential action; when speakers order, promise or place an obligation on someone, they usually exploit linguistic forms such as directives, verbs of volition -including promises and threats- such as wish, punish, and modal verbs. It should be noted that unlike epistemic modality, it refers to acts not propositions.

These meanings are usually expressed with the periphrastic future ‘ir+a’ (be going to) or the simple future in Spanish. See Table 1 for examples.

| strong volition | John will play with his computer [even though his mother has punished him] / John va a jugar con el ordenador [aunque su madre le ha castigado]. |
| willingness and unwillingness | He won’t help me cook the meal. / No me va a ayudar a cocinar. |
| promises | I’ll help you with your homework. / Te voy a ayudar con los deberes |
| Threats | I’ll run if you come any closer / empezaré a correr si se acerca más. |

Table 1. Modal auxiliaries expressing volition in English and Spanish

Deontic modality can be subdivided into (i) directives (deontic possibility: you may leave; deontic necessity: you must leave), (ii) commissives (promises, undertakings: you shall be rewarded), (iii) imperatives. Another subdivision of deontic modality is: (i) possibility (permission) (you may go out now); (ii) necessity (obligation) (you must study). We shall pay attention to the latter in our study. Biber (1999:485) points out two typical structural correlates of deontic modals: (i) the subject is human, (ii) the main verb is dynamic (describing an activity that can be controlled), as in example 1:

(1) In seeking to grasp this dynamic, and portray it, he had become enthused with the duende, the spirit unleashed by the flamenco music and dance, which he believed to be the dynamic of true art and artistic
expression: ‘Repel the angel, kick out the muse’, he was wont to exclaim; arguing that artists must work from the gut’ (AOP, 642).

In addition to epistemic and deontic modality, a number of further modal notions may be defined. However, most scholars agree with the basic distinction EPISTEMIC/ NON-EPISTEMIC. The difference between the epistemic and non-epistemic use of the modals is summarized by Kratzer (1981:52) as follows: ‘if we use an epistemic modal, we are interested in what may or must be the case in our world, given everything we know already and if we use a circumstantial modal, we are interested in what can or must happen, given circumstances of a certain kind.’

Related to these epistemic and non-epistemic modal auxiliaries, English has also admitted into the language a class of ‘semi-auxiliaries’, constructions that behave very much like modals semantically but are problematic for linguists as they behave inconsistently (See Table 2). Thus, dare, need, ought to, and used to share most of the characteristics of modal verbs but are marginal for various reasons. Unlike the central modals, ought and used are followed by to and despite prescriptive objections often combine with do in negative and interrogative constructions, like a full verb: especially in England, They don’t ought to behave like that alongside the more traditionally acceptable They oughtn’t to behave like that. Used to also differs semantically from central modals, since it conveys aspect (habitual situation) and not modality. In negative and interrogative contexts, dare and need may be either modals (I daren’t say a word; Need I say more?) or full verbs with preceding do and following to-infinitive (I don't dare to say a word or the blend without the to: Do I need to say more?).

### Table 2. Summary of deontic modal and semi-modal auxiliaries in English and the correspondences in Spanish

<table>
<thead>
<tr>
<th>DEONTIC MODALS</th>
<th>DEONTIC SEMI-AUXILIARIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>You should help your wife/ Debes ayudar a tu esposa.</td>
<td>I am going to give you permission/ voy a darte permiso.</td>
</tr>
<tr>
<td>You might call Peter tomorrow / Podrías llamar a Peter mañana.</td>
<td>Mary has to study for the exam/ María tiene que estudiar para el examen.</td>
</tr>
<tr>
<td>The solicitor shall sign the contract / El abogado firmará el contrato.</td>
<td>You ought to be there on time / Tienes que ser puntual.</td>
</tr>
<tr>
<td>Need you be here?/ ¿Es necesario/ preciso que estés aquí?</td>
<td>You’ve got to go shopping/ tienes que ir de compras.</td>
</tr>
<tr>
<td>She dare not tell them/ No se atreve a decírselo.</td>
<td>You had better park your car / deberías aparcar el coche.</td>
</tr>
<tr>
<td>You can leave now/ puedes marcharte ya.</td>
<td>You’d best go away now/ lo mejor sería que te fueras/ marcharas ahora.</td>
</tr>
<tr>
<td>Could I now leave please?/ ¿podría irme?</td>
<td>She was supposed to teach me/ Se supone que me iba a enseñar.</td>
</tr>
</tbody>
</table>

3 Palmer (2001) Mood and Modality offers a complete overview of ways in which modality is expressed grammatically in different languages. He makes a distinction between propositional modality (desire, will, capacity) and event modality (where different information about the truth of a proposition is given). See also van der Auwera. and Plungian (1998:79-124).
*Haber + que + infinitive indicates obligation, necessity and advisability. It is only used in the third person singular: ‘hay que tener cuidado al conducir’ (people must drive carefully): when it is focused on the event haber que ‘hay que solucionar el problema’ (the problem must be sorted out).

*Deber + infinitive ‘se debe analizar’ (it must be analysed) has got a clear obligation sense but the periphrastic construction deber + de + infinitive has got an epistemic or evidential reading: ‘debe estar en la oficina’ (she must be in her office).

This general overview of modality in current Modern English and Spanish ends up with three important facts:

A) that modals that share certain meanings go together: MUST, SHOULD, OUGHT, NEED: Obligation + Necessity, likewise TENER QUE, DEBER, ES NECESARIO/ PRECISO;

B) Stubbs (1996: 201-202) remarks that in his real data, several markers of modality often co-occur and he gives the following example: ‘evidently she must have talked to her mother about them you see because on one occasion (…)’ (modality markers italicized). This assertion has proven almost irrelevant in our corpus analysis, although some examples have been found: (2) ‘Poets do not necessarily have to be commentators on the historic present’ (AOP 1778).

C) The social power structure is fundamental for organizing the modal verbs. ‘The one in power’ in a communicative setting has, above all, the power of determining the perspective on the situation at hand, and the person who obeys has to conform to the will of the one in power. A modal verb, like can or may, depends for its use on the relation between the speaker and the hearer with respect to their relative social power and their respective attitude to the situation at hand. For example, in a situation where ‘he’ wants to go out but feels that ‘she’ (his mother) is in power, can utter ‘May I go now?,’ while he would not do that in a setting where he had the power to decide for himself. Thus, both social power and attitude constitute important criteria for the modal utterances. An example from our corpus is a case in point here: (3) ‘The businessman can use you all in the new regime. But you must all acknowledge his obvious superiority’ (AOP 1077-78) where the writer is the one in power who imposes his perspective on other people.

2. Methodology

Six texts have been studied from the British National Corpus with a total of 106,665 words. Their topics are varied and controversial, therefore inviting to the use of modal forms (i.e alcohol and society, amnesty, preventing mental illness, etc). The corpus has been analysed interpreting the semantics and pragmatics of the modal verbs, bearing in mind the core-meaning approach, the contextual approach and the fuzzy set theory put forward by Coates (1983)4. Tables have been made with our findings in order to see which meanings are most frequent in this type of argumentative discourse. Our focus has been can, should, must, have to, need and ought to. Notice that neither occurrences of ought to nor have got to have been found, 32 uses of may are epistemic and one occurrence of need has a deontic interpretation out of 31 linguistic tokens. Lastly, be supposed to is also less frequent in our data (with four examples). It is used in reprimands and counterfactuals as in the following example: (4) Authors are not supposed to avenge themselves in their writings, but they do, and if they were to be prevented, there would be far fewer books (A05 252). In some cases, supposed to suggests action obligated by previous agreement or by tacit understanding between the subject and another party as in the following description of some pictures: (5) Nor do they describe the sort of thing we are supposed to like very much (A05 1442).

4 The core-meaning approach is monosemantic; it tries to describe the underlying semantic system of each verb, with a nuclear or basic meaning (Perkins 1983:4). The contextual approach defends that the meaning of modals is related to their contexts of use and classifies modality as follows: epistemic, deontic and dynamic. The fuzzy set theory rejects formal logic and considers that the meaning of a modal verb is made of a basic meaning and a periphery or fuzzy meaning. Coates’s corpus study proves there are several examples where indeterminacy arises.
We have also analyzed a comparable corpus in Spanish with the forms: poder, deber, tener que, haber de, hay que with a total of 107,312 words. Two examples of the structure es necesario que+ infinitive have been found and one with the structure es preciso que+ infinitive which mark obligation function. These low figures are not included in the table of findings.

<table>
<thead>
<tr>
<th>Meanings</th>
<th>cases</th>
<th>Meanings</th>
<th>Cases</th>
<th>Meanings</th>
<th>Cases</th>
<th>Meanings</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>have to</td>
<td>20</td>
<td>0</td>
<td>8</td>
<td>48</td>
<td>42</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>can/could</td>
<td>28</td>
<td>0</td>
<td>111</td>
<td>111</td>
<td>49</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>Deontic</td>
<td>20</td>
<td>0</td>
<td>8</td>
<td>48</td>
<td>42</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Epistemic</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Indeterminant</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>56</td>
<td>0</td>
<td>8</td>
<td>111</td>
<td>49</td>
<td>0</td>
<td>35</td>
</tr>
</tbody>
</table>

Table 3. Modal forms in English. Total number of words: 106,665

<table>
<thead>
<tr>
<th>Meanings</th>
<th>cases</th>
<th>Meanings</th>
<th>Cases</th>
<th>Meanings</th>
<th>Cases</th>
<th>Meanings</th>
<th>Cases</th>
<th>Meanings</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>poder</td>
<td>27</td>
<td>14</td>
<td>0</td>
<td>65</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>deber</td>
<td>20</td>
<td>0</td>
<td>8</td>
<td>48</td>
<td>42</td>
<td>0</td>
<td>21</td>
<td>47</td>
<td>1</td>
</tr>
<tr>
<td>tener que</td>
<td>36</td>
<td>65</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>22</td>
<td>0</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>haber que</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>56</td>
<td>0</td>
<td>8</td>
<td>111</td>
<td>49</td>
<td>0</td>
<td>35</td>
<td>28</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4. Modal forms and meanings in Spanish. Total number of words: 107,312

3. Discussion of deontic quantitative findings

English and Spanish share quite similar linguistic devices to express deontic modality. The results below are the ratio per thousand words. We find that English uses should above all (0.44\%\%0) followed by have to (0.26\%\%0), must (0.25\%\%0). In Spanish the most frequent token is deber (0.60\%\%0), followed by tener que (0.33 \%\%0), haber que (0.26 \%\%0) and poder (0.13 \%\%0).

<table>
<thead>
<tr>
<th>BNC TEXTS</th>
<th>R</th>
<th>F 0/00</th>
<th>CREA TEXTS</th>
<th>R</th>
<th>F 0/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>have to</td>
<td>28</td>
<td>0.2625</td>
<td>tener que</td>
<td>36</td>
<td>0.3354</td>
</tr>
<tr>
<td>must</td>
<td>27</td>
<td>0.2531</td>
<td>haber que</td>
<td>28</td>
<td>0.2609</td>
</tr>
<tr>
<td>Should</td>
<td>47</td>
<td>0.4406</td>
<td>deber</td>
<td>65</td>
<td>0.6057</td>
</tr>
<tr>
<td>Can</td>
<td>--</td>
<td>0.4406</td>
<td>poder</td>
<td>14</td>
<td>0.1304</td>
</tr>
<tr>
<td>TOTAL</td>
<td>102</td>
<td>0.9562</td>
<td>TOTAL</td>
<td>143</td>
<td>1.3324</td>
</tr>
</tbody>
</table>

Table 5. Raw data and frequency of tokens of deontic modality in English and Spanish per 1000 words.

To determine whether the two corpora showed a similar use of deontic modal verbs OUP Wordsmith 3.0 was used, in particular the Wordlist and Keyword tools. Wordlist offers information about the frequencies of the words searched for in the two subcorpora and keyword offers information about the keyness factor, that
is, the degree of statistical significance for the differences in frequencies of the verbs searched for in the two subcorpora, as in table 5. The frequencies for have to/ tener que, must/ haber que are not statistically significant except for should/ deber. The total counts for these modal verbs shows that English uses 102 tokens, while Spanish uses 143 deontic modal tokens.

4. The semantics and pragmatics of modal auxiliary verbs in English and Spanish IN OUR CORPUS

CAN- MAY /PODER

From a tense perspective, the permission-in-the-past sense is virtually obsolete though Palmer (1990:104) affirms that twentieth-century examples can be found in very formal style. In all these past tense functions, MAY has largely been replaced by CAN, or by be allowed, permitted, have permission, etc. (Quirk et al 1985). Groesema (1992:35) has explained the difference among MAY/ CAN in the following terms:

The different ways in which we interpret CAN and MAY as expressing ‘permission’, show why MAY is often felt to be more formal, correct or polite than CAN. With CAN the addressee is encouraged to consider all the ‘evidence’ for the proposition and ‘permission’ is only part of that, which means that the truth of the proposition is not solely dependent on the permission.

When we are asking for permission e.g. ‘Can I go out?’, the interpretative process that explains this request indicates that this is a desirable thought. From its logical form - Speaker is asking whether [p, I go out] is compatible with the set of all propositions which have a bearing on p, and the world type is potential- the speaker is doubtful about the potential state of affairs described. The hearer must infer that his/ her interlocutor is asking him or her that S/he grants the potentiality of that proposition. In our corpus, we have found no examples of can/ could with a meaning of permission.

Palmer (1990.60) also points out that ‘can is often used to convey a command, often of a brusque or somewhat impolite kind’. The author offers the following examples:

Oh, you can leave me out, thank you very much.
You needn’t take this down and you can scrub that out of this.

Can expresses in this case ‘very confident , (…) sarcastic suggestions’ (Palmer ibid:61). Finally, apart from the deontic uses, we also get in our corpus examples of ability:

(6)'You can sense the creative buzz in the city‘(A0E46), possibility: (7)'Families can stay together through an extremely difficult period‘(A02 143) and some examples where there is a merger of possibility and ability: (8)'However the process of dying can be marred by guilt and rejection‘ (A02 161). Similarly with could, we get an epistemic reading in examples like the following: (9)‘This is one lesson that could save their lives‘(A02 186); and ability: (10)‘Couldn’t they see how it had to be nourished?’ (A0P 1249).

PODER

It is considered as a modal verb in Spanish on syntactic and semantic grounds (Marcos Marin 1975:211). The data examined from CREA indicate that examples of poder in the present have the following readings: permission, ability, mitigation, root possibility and epistemic possibility. It must also be noted that many cases are not easy to fit neatly into these readings. Let us look now at examples of poder, paying special attention to permission:

The most clearly identifiable context for permission includes an agentive subject and future time orientation. Sometimes different codes of law also constitute strong deontic sources and contribute to identify permission more clearly. Finally, three are some weaker deontic sources (people at the same authority level, abstract entities) which determine a contextual meaning which moves away from permission to interpretations of ability or possibility

Cuando tienes la mayoría de edad, puedes ser libre.
(when you are eighteen years old, you can be free)
In this example there is a natural phenomenon: being eighteen years old and the time orientation is generic. Examples of permission in our corpus are the following, notably belonging to the legal register and used as devices to justify certain actions:

(11) El poder legislativo no podrá hacer ninguna ley que produzca agravio [The legislative power will not be able to sanction any damaging law].
(12) Nadie podrá ser condenado más que en virtud de la ley establecida [No-one will be able to be condemned unless by virtue of current regulations].
(13) Nadie podrá dar una orden [No one will be able to give an order].
(14) El Ministro encargado de Tesorería ‘no podrá pagar más que en virtud de una ley’ [The Treasury Minister ‘will not be able to pay unless in accordance with the law’].

Poder has become lexicalised in the expression puede que ‘may be’ but they convey epistemic possibility: (15) puede que a lo mejor diga la verdad [may be s/he is telling the truth].

**SHOULD**

The English word *should* has certain properties which distinguish it from other modal verbs:

A. Unlike other modals, deontic *should* can be used to refer to past events:

(16) ‘But it was from the first emphasized that a priesthood of succession should be established through Aaron, Moses’ brother’ (A0P 295) (*must, *may).

B. With other modals, ambiguous examples tend to involve either a deontic or an epistemic use as one possible interpretation. With *should*, there are cases where neither sense appears to be either epistemic or deontic:

If you work hard, you should buy that house. (‘reasonable expectation’ or ‘normal consequence’)

C. Although *should* and *ought* are often interchangeable, according to Coates (1983: 81), there are examples where *ought* has a different sense:

Applications should be sent by 1st December 2003 at the latest.

This is simply an instruction, whereas with *ought*, this example could imply ‘... but they often aren’t’. *Ought* is also normally stressed whereas *should* is not. An example of an instruction from our corpus is: (17) ‘But it should not be taken too literally’ (A0P 479).

D. There is at least some set of propositions such that p is entailed by it, and the world type is potential:

(18) But this throws into high relief Leonard’s (or at least Breavman’s) denial of spiritual responsibility: if the onus had passed to his uncles, and thereby to his cousins, why should he care?(A0P 1519).

Nine examples of *should* in our corpus are negative. The speakers choose it instead of *must not* in the clauses where they express negative obligation. Pragmatically, there is little doubt that the speaker gets his/her meaning across: s/he presents a list of actions which have got to be done or which have got to be avoided:

(19) We should not, however, think that these years were those of some frustrated novice-monk (not that Judaism has such in any case!) of solitary and sober reading from dawn till nightfall (A0P 518); (20) But perhaps I should not encourage you. (A0P 1076); (21) We should not forget that it was not that long since Samuel Butler had published (in 1878) his famous poem ‘A Psalm Of Montreal’ (A0P 1513).

Finally, notice that the decline of the mandative subjunctive has meant the increase of quasi-subjunctive *should*; (22) ‘It is better that one man should die’ was not infrequently their lot (A0P 1767).

Examples of our Spanish corpus with DEBER expressing desirability are have a frequency of 84% in a text by Lázaro Carreter whose title is ‘El neologismo en el DRAE’:

(23) Valdés enumera algunas voces que el castellano debería adoptar [Valdés enumerates some words that Spanish should adopt]; (24) Nuestros hombres más reflexivos señalan el camino que deben seguir los españoles [Our more thoughtful men point out the way the Spaniards should follow].

When used in the negative, *deber* indicates actions which have got to be done or which have got to be avoided, as in English. As a final point, there are also cases as in English where there is ambiguity between
an epistemic or deontic reading: (25) deben vencerse creencias sólidamente arraigadas [Deeply rooted beliefs should be defeated] which indicates either a ‘reasonable expectation’ or ‘normal consequence’.

SHALL/ WILL

Coates (1983:27) mentions two non-epistemic uses of shall:

A. intention, being synonymous of will in this case:
   (26) Indeed, as we shall presently see, the two great intimacies, as ever, sharply reacted with each other, strengthening the conflict, heightening the ambiguity, posing in ever more painful interjections the question, ‘Who am I?’ (A0P 1811)

B. ‘hearer’s volition’ (usually in interrogative sentences, none found in our corpus).

C. Finally, shall with an obligation sense is used in legal or religious contexts such as the following example from our corpus:
   (27) And these words, that I command thee this day, shall be upon thy heart; and thou shalt teach them diligently unto thy children, and shall talk of them when thou sittest in thy house, and when thou walkest by the way, and when thou liest down, and when thou risest up (A0P 344). Notice that these two examples are the only ones found with a deontic sense, thus they have not been included in the table of quantitative findings.

Some authors like Sweetser (1982:494) consider that both will and shall are borderline modals. According to Groefsema (1992:31), there are certain uses of will which express volition,

(29) Over the next twelve months we will be providing support to a growing number of new and existing local programmes, identified as a result of an extensive survey we have just completed (A02 199);
(30) Aside from our Opening and Closing Galas and special Mid Festival screenings, we will be putting the spotlight on the best films from the international festival circuit and some eagerly awaited new releases (A0E 112).

Likewise, the future in Spanish also expresses volition as in:
   (31) Del análisis, obligatoriamente somero, de estos temas emergirá la figura de Jovellanos como precursor’ [Jovellanos’s figure will emerge as a precursor from the necessarily brief analysis of these topics]
   (32) No cesaré de reclamar contra esa locución insidiosa y bárbara (ciudadano pasivo) (0CF59C2A6DCA) [I shall not stop claiming against this insidious and barbaric expression].

As a final point, it can be pointed out that academic writing in both English and Spanish usually includes precise indications of the writer’s intentions which form the basis of the research or topic being reported. The markers that express this volition are modal auxiliary verbs such as will, shall and semi-auxiliaries (be going to / ir a+ infinitive) and modal lexical verbs (want, like, wish/ querer, desear) as pointed out by Perkins 1983 and Hoye 1997. Although examples of these usages have not been found in our English pilot corpus, we have found some in the CREA sample:

(33) Convendrá notar que esta nueva lengua surge del debate asambleario [it is better to note that this new language develops from the assembly debate ]; (34) la lengua del poder va a convertirse inmediatamente en la lengua del derecho [the language of power is going to turn immediately into the language of the law] (0CF59C2A6DCA)

After examining these expressions of volition, we may suggest that they function as metadiscourse that writers use to organise and evaluate propositions in this type of academic texts (Hyland 2000).

MUST

Mindt (1995:115) has three modal meanings of must, ‘obligation’, the equally infrequent ‘inference/deduction’ which corresponds to ‘logical necessity’ and ‘necessity’. Must when used in a non-epistemic sense affects not only the proposition but what Palmer calls the ‘event’ and Halliday the ‘process’. These are not the speaker’s comment on the process but form part of the content clause itself, thus belonging to Halliday’s ideational function which expresses the speaker’s experience of the real world and in fact gives structure to this experience.
An utterance with MUST can be interpreted in certain contexts as ‘obligation’\(^5\). A good example is:

*You must go the dentist*

Whose logical form is \([p, You go to the dentist]\) is entailed by the set of all propositions which have a bearing on \(p\), and the world type is potential.

The obligation is a direct result of the basic meaning of MUST. When the speaker considers that the event is good for the hearer, MUST indicates the latter’s obligation to carry out the action. If we substitute MUST by SHOULD, we interpret the utterance as a piece of advice. The speaker would describe the action as potential and desirable for the hearer in this latter case. A frequent case of personal obligation is also *I must say, admit, add type*, such as the following example: (35) *Not only sardonic bitterness, we must add but delicate irony, too. (A0P 1482)* where ‘the notion of compulsion or obligation is considerably obscured’ (Visser 1963-73: 1807).

Finally, Leech (1971:77) points out that there are some differences between MUST and HAVE (GOT) TO:

- The difference between *must* (= factual necessity) and *have* (got) to (=theoretical necessity) is illustrated in these examples: Someone must be telling lies (= ‘it’s impossible that everyone is telling the truth’) Someone has to be telling lies (= ‘it’s impossible for everyone to be telling the truth’).

- Therefore, *must* is a modal verb which expresses the necessity of a proposition in a potential state of affairs whereas *have* (got) to expresses the necessity of that proposition but in a real state of affairs. Instances of *must* used in this sense are:

  (36) A novelist adapting his or her work for the screen must also adapt to the different status of the writer in the production process(A0E 525); (37) Columbia University's Law School had no charms, no personal comfort (like the surrounding high-rise buildings); there must be another way. (A0P, 1315).

- Some other examples of *must* from our corpus where the speaker directly imposes an obligation on the addressee are:

  (38) Please note that delegates must book tickets for screenings and events by 5pm on the day. (A0E 337);
  (39) There is open to us only one course of action: we must quit the Confederation, consolidate and centralise our own power (A0P 1048); (40) On engaging a new cantor he would say (in Yiddish), ‘You must be able to sing; but don’t you dare!’ (A0P 169).

Last but not least, it is interesting to note the correlation between the use of this modal and gender. According to Nurmi (2001) who has studied a sample chosen from the Spoken part of the BNC, women lead in the use of *must*, men use more logical necessity and women more ‘personal obligation’. Although I have tried to study this use in the written samples from the BNC, unfortunately, these were not always clearly identified as produced either by a man a woman or co-authored by a man or a woman.

**DEBER**

This modal verb can be used in a deontic or epistemic sense: *Debes obedecer a tus padres* ‘you must obey your parents’ which can be paraphrased as ‘common knowledge points out that it is required / necessary to obey your parents’, therefore it communicates confidence in the realization of \(p\), having connotations that it is ‘very likely’, ‘necessary’ and ‘appropriate’.

When there is a human subject, a non-stative situation and speaker disapproval of not-\(p\), we have examples related to necessity:

---

\(^5\) Notice however that it is not always easy to determine by context a deontic reading. Coates (1983) gives the following example: (i) he must mean business is ambiguous (it could be either epistemic (‘I infer that…’) or deontic (‘it is necessary that…’)) and this will be determined by inspecting a larger context; (ii) at that price, it ought to be good is a merger (where the modal interpretation is inevitably indeterminate between epistemic (‘I infer that…’) and deontic (‘the producer has a moral obligation to offer a good product’). Palmer (1990: 21-2) questions this. Other terms used in this semantic area are: blending, indeterminacy.
HAVE TO/ TENER QUE, HABER DE

Coates (1990:56) points out that have to is a useful resource for speakers who want to express obligation but at the same time want to make clear that they themselves are not the authoritative source of this obligation. Some examples from our corpus support this claim:

(42) ‘An educator only has to prevent one new HIV infection a year to save the NHS his or her entire salary in future AIDS treatment costs alone’ (A02 180)
(43) ‘Complex social problems have to be tackled including homelessness, imprisonment, birth of an infected child and death of one or even both parents’ (A02 60)
(44) Nathan was not too troubled by the error: ‘He’ll have to learn about it soon’, he commented, perhaps even then aware of the grimmer realities behind his words for his family (A0P 391).

Have to/ tener que are also used to express obligated actions which have no clear negative effects on anyone, these actions are often habitual as in the following example from the Spanish corpus: (45) Han tenido que pasar siglos antes de que el derecho al divorcio se viera refrendado por las leyes de nuestro país (EA05C5745DBAF). [Several centuries have had to go by before the right to divorce has been sanctioned by the Spanish Law]

TENER QUE

Its Spanish counterpart, is more commonly used to convey deontic necessity if we compare it with other modals (deber, deber de, haber de). Tengo que hacerlo (I must do it) can be paraphrased: ‘I have to do it because I feel I have an obligation to’. An example from our corpus is: (46) ‘Son cuestiones que mucho tienen que ver con la actualidad de nuestros días’ (EA05C5745DBAF) [These are matters which have to do with current affairs]. A more formal variant is the periphrastic construction haber+de+ infinitive which has been found with a frequency of 82% in a text called ‘La historia como pretexto’ (History as a pretext) in examples like these ones:

(47) Su ejemplo ha de servirme para cumplir las responsabilidades [I must use his example to do my duty];
(48) Tampoco se ha de equivocar nadie con las etiquetas tan marcadas [No one must be wrong about so clearly marked rules];
(49) Ficóbriga, villa que no ha de buscarse en la geografía [Ficóbriga, a village which must not be looked for geographically].

As far as quasi-modals and deontic periphrastic construction in Spanish are concerned, some final comments may be made, divided in two parts:

A) NEED

Need in its deontic sense can be paraphrased by ‘be obliged to’ as in example (50): ‘We need have no reservation that such memories, not least the sounds, entered deeply into the young boy's consciousness, as his mother gave vent to her distress in English and her native Yiddish, as well as symbolically rending her clothes and chanting the dirges’. (A0P 430) can be paraphrased as ‘we feel we do not need reservation….’. This construction is fairly rare in English, even rarer in AmE (Quirk 1985:138).

B) ES PRECISO QUE, ES NECESARIO QUE/ NO HACE FALTA QUE

Similarly, in Spanish we have expressions which are roughly equivalent to need: hace falta/ es necesario/ es preciso and their negative counterparts no hace falta/ no es necesario que and the verb necesitar in its negative form: no necesito, necesita, etc. Examples are:
(51)’Es preciso militar abiertamente –por solitaria y única que sea esa militancia- en la categoría de quienes quieren influir en el mundo que les rodea (EA05C5745DBAF) [It is necessary to be openly politically active –however lonely and unique this political affiliation might be- in the category of those who want to have an influence on the world they live in].

(52) Será necesario partir de una explicación inicial del concepto (...) (0CF59C2A6DCA) [it will be necessary to start from an initial explanation of the concept].

5. Concluding comments and suggestions for the teaching of deontic modals

In the present study I undertook a quantitative and qualitative analysis of deontic modal verbs (must, should) in English and Spanish (tener que, deber). These deontic expressions do not simply report objectively necessary actions, they are devices used to evaluate and justify actions, so that it is important to analyse both their usage and meaning. With regard to the expression of deonticity in the two languages, there is a clear similarity in the expression of deontic modality, and to a lesser extent in the expression of evidentiality in the two pilot corpora studied. It is also remarkable that there was also a higher frequency of deontic modal markers in the case of two written texts from the Spanish conservative newspaper ABC.

After a detailed analysis of the semantics and pragmatics of deontic modal verbs in English and Spanish, I have noticed two caveats on semantic categories: first, there is much more work to be done to explain why some modals are rising and others are not: (i.e have to, tener que) and second, the results have an unavoidable element of approximation. It can be pointed out as well that language-internal and language-external social forces seem to be needed to explain what is going on with modals: grammaticalization, colloquialization (which explains the virtual disappearance of forms such as ought to, not found in our English corpus at all). Written language is being affected clearly by this colloquialization, which explains why the second highest deontic figure in our English corpus is for have to. Its syntactic ‘flexibility’ in comparison with must may explain this rise. Smith (2001) after studying its usage in recent British English has concluded that this rise has taken place in press genres. This is the reason why register-based explanations are needed in explaining these changes: eg. The press is far a more ‘agile’ genre to take on speech patterns than the academic or religious discourse, which are more resistant to change. Last but not least, both English and Spanish share a tendency to use weaker obligation markers such as root should or alternative constructions such as It is essential that/ es necesario que, es preciso que.

I suggest that these corpus findings can be integrated into the teaching of deontic modal forms for Spanish students. Traditional methods for teaching modality offer an unrealistic view of how modals are used. Context-based and genre approaches provide a more useful perspective, reminding students that modals are not stable and are affected by processes such as grammaticalization or colloquialization.

Graded exercises for advanced students can be developed to show, for example, that English favors the use of weak obligation markers such as should, it is essential that in press texts or that legal or religious texts use other markers for deontic modality such as ought to, which are hardly ever used in other genres.

To conclude, I offer some examples of exercises that can be used for teaching other aspects of deontic modality to lower level students. The idea is that students explore and get comfortable with the formal properties of the deontic modals, bearing in mind that many of the mistakes students make with semi-modals come from over-generalizing formal properties. Besides, the students must remember also that, when these deontic modals are used for social interaction, the features of the social situation be taken into account as well such as power relationship among the participants and other intercultural related issues (age, social status, etc.)
Activity A: learning the modal forms *have to, must* in the negative for lower level students who often mix-up them causing confusion. The outline could be as follows:

- Ask about weekly routines. Students make a list of things they have to do every week.
- Discuss the differences between these two modals in the positive form: *have to* is used for daily/weekly routines while *must* indicates strong personal obligation.
- Compare *don’t have to* vs *mustn’t*: the former expresses that the person isn’t asked to do something but may do it if she would like to while the latter expresses prohibition.

Activity B: explain rules and regulations to someone, i.e doctor’s instructions to a sick patient using the modal verbs *can, must, should*. Level: Intermediate.

Activity C: Teach students that *must* in its non-epistemic necessity use collocates with adverbs such as *APPARENTLY, CERTAINLY, CLEARLY, DEFINITELY, INDEED, INEVITABLY, OBVIOUSLY, PLAINLY, SIMPLY, SURELY* in pre- or post- auxiliary position functioning as emphasizers. Level: advanced.

Activity D: For the more advanced learner, there are also benefits to be gained in adopting an explicitly contrastive approach where s/he is required to translate from L1 and L2 and vice versa (Hoye 1997:262-3). The learner is asked to translate any of the corpora examples shown as examples in this paper. The translations are then evaluated in class and a preferred version is offered. The process of evaluation would increase awareness of how the deontic modals function in specific contexts. More translation exercises can help sensitize advanced students to matters of style and appropriacy which go beyond the mechanical mastery of these deontic structures.

After implementing these activities, diagnostic testing (Tuckman 1988) –which measures the area in which learning has and has not occurred for the learner- will determine our student’s understanding and production of English deontic modals through the following objectives: knowledge, comprehension, application (applying the knowledge of deontic modals to how they interrelate in the production of an oral/written message), analysis, synthesis (i.e organizing parts to produce a coherent written composition using deontic modals) and evaluation (making quantitative and qualitative judgments about the deontic modals).

REFERENCES


