

The influence of genre and register on epistemic modality in spoken English: a preliminary study

Marta CARRETERO
Universidad Complutense de Madrid

ABSTRACT

Many of the existing studies on the influence of genre and register on modality in English tend to approach the use of all kinds of modality in a concrete text-type. Contrariwise, this article concentrates on one kind of modality (the epistemic), and covers its use in a wide range of genres within spoken English. This task has been carried out with the aid of six naturally-occurring texts of 5,000 words each. The quantitative study of the epistemic devices in these texts shows the high degree of dependency of the expression of epistemic modality on certain factors of genre and register: the overall purpose of the text and the individual purposes of the participants; the degree of planning; the need for accuracy; the topic of the text (field), and the social relationships between the participants (tenor).

Key words: epistemic modality; genre; register; spoken English; text-types.

RESUMEN

LA INFLUENCIA DEL GÉNERO Y EL REGISTRO SOBRE LA MODALIDAD EPISTÉMICA EN EL INGLÉS HABLADO: UN ESTUDIO PRELIMINAR

Muchos de los estudios que versan sobre la influencia del género y el registro sobre la modalidad tienden a abordar el uso de todas las clases de modalidad en un tipo de texto concreto. Este artículo, al contrario, abarca sólo una clase de modalidad (la epistémica), y da cuenta de su uso en varios géneros del inglés hablado. Esta tarea se ha realizado con la ayuda de seis textos auténticos de 5.000 palabras cada uno. El estudio cuantitativo de los elementos léxicos epistémicos que aparecen en estos textos

muestra el alto grado de dependencia de la expresión de la modalidad epistémica con respecto a algunos rasgos de género y registro: el propósito global del texto y los propósitos individuales de los participantes; el grados de planificación; la necesidad de precisión; el tópico del texto, y las relaciones sociales que se dan entre los participantes.

Palabras clave: modalidad epistémica; género; registro; inglés hablado; tipos de texto.

1. INTRODUCTION AND DESCRIPTION OF THE DATA

Much of the literature on the role of genre and/or register in the expression of modality in English covers all kinds of modality and concentrates on well-defined text-types with specific traits (He 1993, Turnbull and Saxton 1997, among others). In contrast, this article offers a panoramic view of the influence of genre and register on one type of modality (the epistemic) in spoken English. The study is based on six texts from Svartvik and Quirk's (1980) corpus of spoken English produced after 1950 by educated native speakers of British English, in the machine-readable version. All the texts have a length of 5,000 words and are interrupted at that point. Three are divided into sub-texts, and this division will be taken into account where necessary. The texts have been selected on account of their differences in terms of genre and register (see Section 2), which leads us to predict considerable differences in the realisations of epistemic modality. A complete reading of the texts has been carried out for a better understanding of each epistemic expression in its context, but, in order to ensure the inclusion of all the tokens, this manual search has been verified by a computational search with the aid of the concordance program TACT, devised by the University of Toronto. The subject and contents of the texts in terms of genre and register are described in Section 2.

2. THE APPROACH TO GENRE AND REGISTER

2.1. The approach to genre

The concept of genre which will serve as point of departure is based on that proposed by Bhatia (1993), who, in the lines of Swales (1990), describes it as a communicative event characterised by a definite structure and purposiveness:

it is a recognizable communicative event characterized by a set of communicative purpose(s) identified and mutually understood by the members of the professional or academic community in which it regularly occurs. Most often it is highly structured and conventionalized with constraints on allowable contributions in terms of their intent, positioning, form and functional value. These constraints, however, are often exploited by the expert members of the discourse community to achieve private intentions within the framework of socially recognized purpose(s). (Bhatia 1993: 13)

It must be noted that the present article differs from the works of Swales and Bhatia in that it covers a wide range of genres within spoken English, not limited to professional and academic settings. Therefore, we could replace the expression 'professional or academic community' by 'linguistic community'. Moreover, the genres treated here, unlike those covered by Swales and Bhatia, are not prototypical in that they are difficult to divide into clear and/or relatively short stages. Due to this feature, and also to the fact that the texts are interrupted after the 5000th word (with the consequent loss of access to the final parts), little attention will be paid to generic structure. In contrast, purposiveness will be shown to be crucial. Among other factors which make differences among genres (Biber 1988, Swales 1990), I will consider the degree of planning and the need for accuracy¹.

2.2. The approach to register

According to Halliday and Hasan (1989), registers are characterised by the context of situation, which comprises elements such as the participants in the situation, the verbal and non-verbal actions of the participants and the surrounding objects and events when they have some bearing on the verbal action, among many others. The context of situation can be divided into three main components: field, tenor and mode. Field is the entity or activity about which the text is concerned²; tenor concerns the social role relationships between interactants, and mode is the role of language in a text, in terms of the channel by which language is transmitted (spoken, written, or a combination of the two, such as written to be spoken or spoken to be written) and the primary or ancillary role of language (compare, for instance, telling a story and giving a practical tennis lesson). In the ensuing text analysis I will not make specific comments with respect to mode, since the differences in channel are largely coincident with those of 'degree of planning', and the role of language is primary in all the texts. On the other hand, much space will be devoted to field, since it will prove to be a crucial factor for the expression of epistemic modality. Concerning tenor, its influence in this respect largely

overlaps that of the previous factors. Some instances of this overlapping are: the purposes of the texts are pursued with other participants in mind; a high degree of planning and of need for accuracy correlates with a high degree of formality; the more risky a field is (in the sense that susceptibilities can arise), the more tactful participants will be. This last statement is the one which has most theoretical implications for systemic-functional linguistics: the fact that field and tenor are not independent in their effects on epistemic modality (which belongs to the interpersonal macrofunction) runs counter to the view stated in Halliday (1978: 122) and adopted by many of his followers (for instance, Martin 1992: 494 ff.), that there is a systematic correlation between register variables and macrofunctions, according to which field exerts its influence mainly on ideational choice, and tenor on interpersonal choice.

2.3. Characterisation of the texts in terms of genre and register

According to what was explained in previous sections, the six texts will be described in terms of the genre features of purpose, degree of planning and need for accuracy, together with the register features of field and tenor.

Text LLC-12-1 contains four SERMONS issued in Anglican religious celebrations; the purpose of the clergyman is to give the audience advice about courses of action and behaviour coherent with their faith. The degree of planning is high. There is no great need for accuracy, even though the speech needs to be supported with adequate examples from the Bible and other sources. The SERMONS deal with the hardship of Christian life and the attitude of the faithful towards their vicar and the Church in general; they are monologues, in which the most powerful participant, the clergyman, is not expected to be interrupted.

Text LLC-12-4 contains two judicial VERDICTS, by which the speaker (the judge) imposes courses of action on the defendant and/or on the plaintiff's lawyer. The degree of planning and the need for accuracy are very high: the judge's decision has to be based on firm evidence. The verdicts concern an accident and an allowance for an ex-wife. As in the SERMONS, the speaker is expected to be the only active participant in the speech event.

The remaining four texts differ from these two in that they are dialogues, in which the aims of the participants are often heterogeneous and sometimes conflicting. This difference in tenor accounts for differences in the epistemic realisations, as will be shown in the following section.

Text LLC-11-1 is a CROSS-EXAMINATION in which a plaintiff's lawyer is cross-examining a defendant about the validity of a will. The overall purpose of the text is to reach conclusions about this issue. Obviously, the goals of the plaintiff's lawyer and the defendant are opposed, while the judge

wishes to come nearer to what the truth is. The most powerful participant is the judge, who has the power to interrupt the dialogue whenever he³ wishes, and to make decisions after it is finished; as regards the other two participants, the defendant is the better knower of the situation, since he was present when his mother signed the will, whereas the plaintiff's lawyer is more powerful in terms of discourse management: since she is cross-examining the defendant, she can handle the topics that she wishes, and the defendant is obliged to answer her questions. Concerning planning, all the participants have some preparation, but none can predict the contribution of the others, and consequently the text is less prepared than the previous two. The need for accuracy is very high: the account of the facts has to be as precise as possible.

Text LLC-5-1 is a public DEBATE on radio or television, in which famous people from different walks of life discuss topics of current interest. The aims of the moderator and the guests are to make the programme interesting and amusing for the audience; additionally, the guests wish to give a good impression about their knowledge and reasoning. The moderator has a high degree of preparation as regards the topics to be introduced, but she somehow has to adapt her contributions to those of the other participants. The need for accuracy is not high, since the participants are not experts in the issues concerned, even though they have to be more careful than in a private conversation.

Text LLC-1-2 contains three ACADEMIC CONVERSATIONS between pairs of academics about work. The main purpose of the participants is to exchange ideas about the issues, without making final decisions. The topics are planned to a certain extent, but the course of the conversation made up of the succession of individual turns is not very predictable. The members of the pairs have roughly the same age and status; the maintenance of a good relationship is essential, so that they have to be careful when opposite interests meet; in these texts, the clash of interests does not usually take place between the two members of each pair of participants, but between them and some absent colleagues.

Text LLC-2-10 is an INFORMAL CONVERSATION between two couples, one married, the other engaged, at the home of the former. The main purpose of the conversation is the maintenance of a good relationship, the transmission of information being secondary. The participants do not have to be especially careful with their contributions, since there are no clashes of interests. The degree of planning and the need for accuracy are low in comparison to those of the other texts. The changes of field are continuous, from house decoration through old acquaintances to eating cherries, among many other topics.

3. THE APPROACH TO EPISTEMIC MODALITY

3.1. The scope of epistemic modality

Epistemic modality will comprise the linguistic devices by which the speaker assesses his/her certainty that the state of affairs referred to in the utterance is occurring, has occurred or will occur. This concept is rather restrictive in comparison to that employed in other works (Palmer (1986), Stubbs (1986), Coates (1987, 1990) and Maynard (1993) among others). These authors also include devices indicating commitment or detachment by assessing something different from certainty. These devices include, among many others, all kinds of evidentials, hedges which qualify the codification of the message (*kind of / sort of / or something...*), and degree adverbs such as *slightly, a bit* and *quite*; these expressions will not be treated here as epistemic. On the other hand, the scope will comprise those expressions which are primarily evidential but also assess the speaker's certainty, such as *apparent(ly), obvious(ly)* and the verb *seem* and its derived words.

3.2. Criteria for sub-classification of epistemic expressions

The epistemic expressions included in the analysis will be classified according to three criteria: syntax, degree of probability, and subjectivity.

3.2.1. Syntax

According to this criterion, by far the least problematic, the expressions will be divided into: auxiliary verbs, lexical verbs, adverbs/adverbials, adjectives, and nouns/ nominal expressions.

3.2.2. Degree of probability

A distinction will be made between the three subtypes proposed in Halliday (1994: 76 and 358-363), that is, high, median and low. The delimiting criteria for the groups will be the following⁴:

- The **low** degree includes the expressions which indicate lack of knowledge of the truth of the utterance and can be followed by *whether*, such as *doubt, not know* and *wonder*, as well as those which may be used twice in the same sentence in a coordinating construction

with the two clauses differing only in polarity, as in *She **may** or **may not** be at home*.

- The **median** degree comprises those expressions which cannot be used in the construction signalled above, and allow negative raising: for example, *I don't think that X* and *it is not probable that X* are roughly equivalent to *I think that not-X* and *it is probable that not-X*, respectively. It also includes expressions which do not allow negative raising but: a) share the root with one which does, such as the adverb *probably*, or b) its strength is comparable to that of an expression which allows negative raising, as is the case of *in my view*, *I believe* or *I guess* with respect to *I think*; c) make explicit the kind of evidence which the speaker has as well as its incompleteness: *alleged(ly)*, *to judge from...*, *if I remember*, *from what I can understand*.
- The **high** degree is constituted by the expressions which do not fit into the low and median groups described above: for example, the modals *will* and *must*, as well as *sure(ly)* and *certain(ly)*.

These subtypes also include negative epistemic expressions which convey commitment to the falsity of an utterance: for instance, *impossible* or *have no reason to believe* will be considered as high, *not likely* as median and *not sure* as low.

The criteria described above permit us to classify most of the epistemic expressions found in the texts. However, a few specifications must be made about the classification of certain devices:

A) In certain cases, collocates motivate the classification in different places of expressions sharing the same root: for example, the noun *possibility* is normally low, but in the instance *there is a considerable possibility* it is counted as high; similarly, the adjective *unlikely* is usually median, but high in the collocation *highly unlikely*.

B) The combinations with the verb *think* may also have a non-epistemic meaning when the truth of the utterance is not empirically verifiable (as in *I think the skirt you are wearing suits you* uttered in a face-to-face conversation). In these cases, the state of affairs is not qualified with respect to certainty, but is assigned instead the status of a value judgement; these cases will be ruled out. In the same situation are the adverbials *in my opinion/view* and *to my mind*.

C) The modal auxiliary *will* does not lend itself to a satisfactory solution. It is clearly an epistemic expression of the ‘high’ subtype when it refers to present or past time, as in *She will be finishing her article now* or *She will have finished her article by now* (cf. Halliday’s (1994) consideration of this *will* as ‘median’). However, when it refers to the future, it may have a similar epistemic value, as in *Don’t worry! They will help you* uttered when the helpfulness of the referent of *they* is almost certain, but in cases such as *I will be 24 tomorrow* it is “little more than a marker of future tense” (Coates 1983: 179). This approximation of future *will* to a tense marker has motivated its consideration by Halliday (1994: 198-207) as a marker of future tense, outside the modal system; more tentatively, Nuyts (2000: 173) states that the epistemic value of such occurrences is questionable. Nevertheless, it may be argued that even in these cases *will* is not entirely devoid of epistemic value, since English has resources which can bring future states of affairs nearer factivity, namely the Present Simple and the Present Progressive combined with future time adverbs.

In view of this state of things, I will consider future *will* as epistemic when it is uncontracted, since it is given greater prominence in speech, but not when it is contracted. I acknowledge that this procedure is not fully satisfactory, since non-contraction may be due to phonological environment, but it is valid for the purposes of this article: the number of occurrences of uncontracted future *will* is significant only in the SERMONS (10 occurrences), in which they often reflect the clergyman’s faith that future events will occur according to God’s design, and in the DEBATE (5 occurrences), in which it is used as a persuasive device expressing that things are certain to happen in the ways that the speakers state.

Following a similar criterion, the modal auxiliary *shall* of prediction will always be considered as epistemic, since it is formally more marked than uncontracted *will*.

D) Another conflictive expression is the auxiliary *would*, which is adequately characterised by Coates (1983: 205) as “both the past form of *will* and a general hypothetical marker”. The epistemic strength of *would* is different in each of these uses: in the first case, it is comparable to that of *will* (as in *He would be about 35 when he married*), but in the second case either the modality is very weak (*If I won the prize tomorrow I would buy a new house*) or counterfactual (*If I had won the prize yesterday I would have bought a new house*)⁵. Consequently, the first type of *would* will be considered as an expression of high probability, and the second as low.

3.2.3. *Degrees of subjectivity*

The issue of subjectivity will be treated on the lines of Nuyts (2000), who makes the distinction between subjective and intersubjective epistemic modality. These categories differ in a way from the traditional ‘subjective’ and ‘objective’ epistemic modality, which included, respectively, the expressions conveying a metapositional attitude of the speaker and those conveying probability as a fact. Nuyts (2000: 33-39) considers that, in all occurrences of epistemic modality, the evidence is the speaker’s, the difference lying in its status: epistemic expressions may be: a) subjective, when the speaker assumes strictly personal responsibility for the epistemic evaluation; b) intersubjective, when s/he suggests that the evidence is known or accessible to a larger group of people, especially the addressee; or c) neutral, when this element of (inter)subjectivity is not present. Nuyts’ characterisation of epistemic expressions in terms of subjectivity is as follows: epistemic adjectives such as *possible* and *probable* are intersubjective; adverbs and modal auxiliaries are neutral⁶, and mental state predicates such as *I think* are subjective. This classification holds for the three languages included in this study: Dutch, German and English.

For this article, which covers a much wider range of epistemic expressions than Nuyts (2000), I have delimited each of these three subtypes in the following way:

a) **Subjective** expressions will be those which specify that the speaker is the source of the epistemic judgement. This is the case of some mental state predicates such as *I (don’t) believe/ think/ suppose* or *I should have thought*, adjectives (*I am (not) sure/ certain/ confident that...*) and adverbial expressions (*as far as I know/remember/can see...*)⁷.

b) The **intersubjective** subtype will comprise expressions of two kinds:

- Those in which the *epistemic qualification* itself is presented as shared (*we (don’t) know*) or as accessible to the addressee and third persons, as in the adjective *incredible*, adverbial expressions (*of course, without question*) and copular or existential constructions (*it’s common ground...*).
- Those which make explicit that the *evidence* which leads the speaker to the formulation of the epistemic qualification is known or accessible to a larger group of people, especially the addressee. These expressions include, for instance, the adjectives *clear, evident, obvious, alleged, apparent* and the corresponding adverbs, and mental state predicates such as *appear, look, seem* and *sound*.

c) **Neutral** expressions will be those which make explicit neither the speaker as source nor the accessibility of the evidence or of the qualification itself. This is the case of many expressions which play a central role within the category of epistemic modality, such as the modal auxiliaries⁸, adjectives (*true, (un)likely*), and adverbs or adverbials (*certainly, indeed, surely, maybe, perhaps, possibly...*).

The complexity of the epistemic nouns and nominal expressions with respect to this category is worth mentioning. Many of these may be classified in more than one subtype, depending on the constructions they are part of. According of the criteria set forth above, the nominal expressions found in the texts are classified as follows:

- subjective: *all I know, my estimate*;
- intersubjective, when the nominal expressions form part of copular or existential constructions: *it's common ground, there is no doubt / suggestion / question...*
- neutral, when the nouns are preceded by the indefinite or the definite article: *a/the conclusion/estimate/possibility...*

3.3. Taxonomy of epistemic expressions

According to the three criteria mentioned above, the occurrences of epistemic expressions found in the six texts are classified as follows:

3.3.1. Expressions of high probability

- Subjective:
 - Expressions with modal lexical verbs in the first person singular: *bet, can only think, can't think, come to a/the conclusion, couldn't believe, not doubt, have no doubt, have no reason to believe, know, emphatically say, see no reason to doubt, take it.*
 - Adjectives with the verb *be* in the first person singular: *certain, confident, convinced, positive, sure.*
 - Adverbials: *for all I know, for all I've been told.*
 - Nouns or nominal expressions: *all I know.*
- Intersubjective:
 - Adjectives: *incredible, clear, evident, obvious.*
 - Adverbs and adverbials: *clearly, evidently, obviously, of course, plainly, without question.*

- Verbs in the first person plural: *we know*.
- Nominal expressions within existential constructions: *it's common ground, there is a considerable possibility, there is no doubt/suggestion/question*.
- Neutral:
 - Auxiliaries or semi-auxiliaries: *cannot, could not, have (got) to, must, shall, will, would* (past time).
 - Adverbials: *certainly, definitely, in all probability, (in) no doubt, in truth, indeed, surely, without question*.
 - Adjectives and adjectival expressions: *highly unlikely, true*.
 - Nouns and nominal expressions: *(the) claim, (that) conclusion*.

3.3.2. *Expressions of median probability*

- Subjective:
 - Expressions with modal lexical verbs in the first person singular: *am inclined to think, assume, believe, could say, estimate, expect, feel, find, gather, gathered, guess, hope, imagine, recall, regard, seem to remember, should expect, should have thought, should think, suggest, suppose, take the view, think, thought, understand, would cavil, would expect, would have thought, would take it would think; occur to me*.
 - Adverbials: *as far as I can see, as far as I know, as far as I remember, as I understand it, in my mind, in my view, if I remember, from what I (can) understand, to my mind*.
 - Nouns and nominal expressions: *(my) estimate*.
- Intersubjective:
 - Semi-auxiliary: *be supposed to*.
 - Expressions with lexical verbs: *appear, look, seem, sound, (it) would suggest*.
 - Adjectives or participles: *alleged, apparent, suggested*.
 - Adverbials: *apparently, presumably, seemingly, supposedly; so far as appeared, to judge from...*
- Neutral:
 - Auxiliaries or semi-auxiliaries: *ought, should*.
 - Adverbs and adverbials: *(not very) likely, probably*.
 - Adjective: *likely*⁹.

- Nominal groups with the definite article *a(n)* or *the*: *estimate, guess, guesswork, thought*.

3.3.3. *Expressions of low probability*

- Subjective:
 - Expressions with lexical verbs in the first person singular: *am wondering, doubt, not know, wonder*; the expression *I cannot rule out the prospects altogether* can also be included here.
 - Adjectival expressions: *not certain, not sure*.
- Intersubjective:
 - Expressions with lexical verbs: *we don't know*.
- Neutral:
 - Auxiliaries: *could, may, might, would* (hypothetical).
 - Adverbials: *maybe, perhaps, possibly*.
 - Nouns: *possibility*.

4. THE ROLE OF EPISTEMIC MODALITY IN THE TEXTS

At this point I will proceed to the analysis of the epistemic expressions in the six texts. The total number of epistemic expressions of the different types set above in each text are specified in Appendix 2. Local comparisons will be made between each text concerned and those analysed previously, whereas the overall conclusions will be dealt with in Section 5.

4.1. The SERMONS

The epistemic expressions in the four SERMONS total 57, which are distributed as follows with respect to probability: 40 high, 8 median and 9 low. This predominance of the high degree is in consonance with the characterisation of these texts in terms of genre and register: the clergyman has to adopt a persuasive tone towards the audience. He does not speak as an individual, but as a member of the Church who is transmitting God's word to the faithful, so that there is little place for hesitation. In particular, I must highlight the frequency of uncontracted *will* (10 cases) and *shall* (6 cases,

some with second and third person subjects), which, as has been stated in 3.2.2., often reflect the clergyman's expression of faith that future events will occur according to God's design. This is illustrated in (1), in which the assertiveness in the discourse is also enhanced by other devices (the imperative, the verb *mocked* and the intensifier *perfectly well*):

- 1) "don't be deceived# - "God is "not mocked# - God is !!perfectly well able to distinguish# . the wheat from the tares# . "and 'at 'the "time 'of "his 'own "choice# - the distinction "!"{will _be}!finally{drawn#}# - (Sermon A, 122-127)¹⁰

It is also noticeable that 7 of the 17 expressions totalling the median and low degrees are located in the first sermon, but this does not mean a difference in style: most of them have a concessive meaning, i.e. they signal facts as irrelevant for the main purpose of the speech. This is the case of *probably*, *perhaps* and *may* in (2), in which there is a concessive rhetorical relation linking the three modalised clauses with the clause beginning with *but*, whose content is highlighted with the intensifiers *at all events* and *the slightest*:

- 2) but **probably** :everyone# . to whom the Church means :anything# ^has "mentally {drawn#}# . ^not a slim paperback# - ^but a "vast "tome# . under the ^same pro:vocative :title # "What's "Wrong with the :Church# - it **may** even :run to !two !volumes# . [...] # **per^haps** there is a certain satisfaction# in this ^exercise# - in a frustrating sort of way# - but at ^all e_vents# . it ^cannot pretend to the !slightest claim# . to origin!\ality# - (Sermon A, 53-72)

Another feature of the epistemic expressions in the SERMONS is the scarcity of subjective expressions (only 10). In this respect, it is also noteworthy that the 6 occurrences of *know* have *we* as subject: the clergyman presents the knowledge as inferrable from God's word, and therefore as accessible to the audience. For example, in (3) he claims that the faithful know that something is wrong with the hurried life of these days:

- 3) and the ^tragedy is# - - ((that)) we **know** in our own hearts# that "there's ^something am/iss# [...] we ^realize# ((that)) ^true civilization# ^general . :genuine progress is# - "not . to be 'found in all those:{marvellous}'twentieth 'century inventions# [...] ((we should)) ad^mire them# - - [...] ((but)) we **know** in our hearts# - - that "not in :all this# does ^true !human :progress lie# - - we **know** that it :lies elsewhere# - (Sermon B, 402-424).

This combination of an overall high degree of probability and a low one of subjectivity may well lead to the characterisation of the SERMONS as strongly monoglossic within appraisal theory (White 1999, 2000; Martin 2000): the clergyman speaks in the name of God and the Church and therefore has to be clear in suggesting courses of thought and action to the audience, so that there is little place for alternative interpretations of the facts dealt with.

4.2. The VERDICTS

The VERDICTS contain 101 epistemic expressions, i.e. almost twice as many as the SERMONS in the same number of words. This higher frequency is not surprising, since here certainty is a crucial issue: the judge presents a view of the facts which has to be accurate and convincing at the same time. He is to display self-confidence; therefore, it is not surprising that expressions of low probability are not frequent.

However, a remarkable difference may be found between the two verdicts: the number of expressions of median and low probability is noticeably higher in the second subtext than in the first. This dissimilarity is accounted for by field: Verdict A is based on the judge's reconstruction of sheer facts, namely on what exactly happened with the car, the motor-cycle and the bicycle involved in the accident. The need for accuracy overrides that of politeness and tact, and the expressions of median and low probability often refer to subsidiary information, just as in the SERMONS. For instance, in (4), the judge reports how the plaintiff called a colleague of his who was within sight, and the expressions *apparently* and *I think* refer to the place in which this colleague was:

- 4) he ^c^alled# an^other c/olleague of 'his# a Mr ^P^erry# . who **ap^p^arently#** was at ^that t\ime# - in ^what **I :think** is {c^alled} the con:tr\ol 'box# . ^inside# the ^Hill '[gei] 'Morris((s)) g^ate# (Verdict A, 610-617)

On the other hand, in Verdict B the judge has to decide on the allowance to be conferred to an ex-wife, an issue which has to be based not only on facts, but also on the personal situation of the people involved, including issues such as character, financial prospects and health; the information about these matters often contains 'impolite beliefs', a kind of face-threatening act in the sense of Brown and Levinson (1987). This accounts for the frequent use of median and low epistemic expressions as politeness strategies:

- 5) but ^Mrs 'Baddeley :Pr\itchard# ((is)) ^one of 'those **per'haps** !f\ortunate {^p\eople#}# - who ^when in n/eed# can ^always '[fai] :find . fr/iends# [...] who ^**I would th=ink#** have ^very 'little . expec:t\ation# or in^deed h=ope# . of ^ever _being re!p\aid# (Verdict B, 1083-1093)

As regards subjectivity, the distribution of subjective, intersubjective and neutral expressions of high probability is quite balanced, especially in the first subtext (in the second there is a predominance of the neutral type, which is perhaps due to the judge's tendency to compensate for the high frequency of median subjective expressions). All three subtypes reinforce the judge's assertiveness in complementary ways: by using subjective devices, he expresses a strong personal commitment to his reconstruction of the facts or situation; by means of intersubjective devices, he focuses on the crucial role of the evidence or on the common-sense nature of his conclusions; and neutral expressions such as *in truth*, *in all probability* or *no doubt* lay emphasis on his mental state of certainty. An example of combination of the effects of a subjective and an intersubjective strengthener is (6):

- 6) ^that the !pl\aintiff# ^put 'out his h\and# . and ^p\ulled a'cross# . ^**I 'have 'not the 'slightest !d\oubt#** - it's ^**common gr\ound#** . ^that !he !d\id 'so# . (Verdict A, 578-583)

In contrast, all the expressions of low probability are neutral except one. This is due to the fact that, in uttering weak epistemic judgements, the speaker does not feel the same need to enhance personal commitment or accessibility of the evidence.

From the previous comments it can easily be deduced that the VERDICTS are more heteroglossic than the SERMONS: the judge expresses his almost absolute certainty that the facts or the situation are as he reports them, but also has to acknowledge that other people, especially (some of) those concerned, are likely to have a different view; therefore, he is overtly persuasive, and one device which contributes to this style is the use of epistemic expressions of different types in the ways described above.

4.3. The CROSS-EXAMINATION

This text contains 99 epistemic expressions, that is, a very similar number to those in the VERDICTS. This similarity is not surprising, since both are judicial texts in which truth is a central issue, the difference lying in the stage

of the lawsuit. The total number of epistemic expressions uttered by each participant is as follows:

- Plaintiff's lawyer: 31 expressions (17 high, 9 median, 5 low);
- Defendant: 54 expressions (23 high, 20 median, 11 low);
- Judge: 14 expressions (4 high, 4 median, 6 low).

The defendant is by far the participant who utters most epistemic expressions. One reason for this is that he is the participant who utters the highest number of words; another, more important, is that his account of the facts has to be as accurate as possible, and therefore he has to specify his commitment to the truth of what he is saying. The concern about the defendant's certainty is also made manifest in the 17 occurrences of devices by which the plaintiff's lawyer asks him about it, such as *are you sure...?* and *you're quite certain* (these have not been counted as epistemic, since they do not qualify the speaker's certainty, or do so only by implicature). Not surprisingly, the defendant highlights his role as a privileged knower, since he is the only participant who witnessed his mother's signing the will: consequently, most of his epistemic expressions are subjective. Those of high probability serve him to insist on the truth of facts favouring the validity of the will. For instance, in (7) he insists that, contrary to what the plaintiff's lawyer believes, his mother asked another branch of the family, the Kays, to witness her signature:

- 7) PL: the ^old l\ady# your ^m\other# ^did !not \ask# - - the ^K\ays#
to ^witness her s\ignature# ^d\id she# -
DF: ^yes she d\id# .
PL: ^d/id 'she#
DF: ^yes she d\id# - - I'm ^s\ure she 'did# - . I'm ^sure she [sh\ed]#
. ^s\aid# to ^Mrs K/ay# . I ^want you to 'witness my . 'signature
to 'my w\ill# . I'm - I'm " ^c\ertain# that she ^said those
w\ords# - (750-765)

Many of the median expressions also serve this purpose. Most remarkably, the nine occurrences of *I think* are uttered under one or more of the following conditions, which approximate its strength to that of the 'high' group (*cf.* Simon-Vandenberg 2000): initial position, focus, and/or combination with expressions of the high degree. Contrariwise, in other cases the median expressions have a similar function to the low ones, namely that of downtoning the defendant's assertiveness when he has to admit his lack of total knowledge. In some cases this insecurity is not too relevant to the main

purpose of the cross-examination, and the matter is not pursued any further (8). However, in other instances, the issue in question is more important, and consequently the defendant makes a great effort to specify his degree of certainty. This is the case of (9), in which the defendant speaks about Captain Kay's opinion about the validity of the will. Notice how the modality is quite strong in his first contribution; however, the plaintiff's lawyer realises that he is not absolutely confident and asks a more specific question, which is answered in a less assertive tone with weaker epistemic expressions:

- 8) PL: and ^how 'long did it :t\ake# ^for her to com'plete her l\unch#
 - - -
 DF: oh ^I **would** !th=ink# - - - ^pr=obably# . ^f/ifteen 'minutes#
 - (29-33)
- 9) DF: ^w\ell# . I ^**think** pr\obably# - [@:] ^what !Captain K\ay# .
 [s] . ^**must** have !s\aid w/as# - a ^will is :l\egal# if it's
 " ^w\itnessed {on the ^back of an envelope#}# - - -
 PL: ^did !he s/ay# that ^he had p\ersonally w/itnessed one#
 DF: ^w\ell# . I ^**could** have b\een# I ^**could** have been :wr\ong
 th/ere# - [@] by ^s\aying# ^I !**thought** he 'said h/e 'had# but
 he ^**may** have 'said a :w\ill# - ^witnessed on the 'back of an
 \envelope was l/egal# (931-945)

In contrast to the defendant, the plaintiff's lawyer seems to avoid the use of subjective epistemic expressions to a high extent: she is not the privileged knower, and not surprisingly she prefers neutral and intersubjective devices to express epistemic qualifications. Her expressions of high probability are sometimes issued to express agreement with the defendant or the judge on concrete points (as is the case of the 3 occurrences of each *of course* and *certainly*), and in other cases they are used for insisting that the will is not valid (10). This function is also frequently carried out with median expressions, as in (11), in which *quite plainly* confers additional force to *I suggest*; concerning her expressions of low probability, they often increase the tentativeness in signalling a course of action for the procedure, thus softening her intrusion into the judge's domain (i.e. they are used as a negative politeness strategies) (12):

- 10) PL: do you ^[sta:] my 'lord n/ow# the ^doctor . is . !**plainly** . and
 {com!pl\etely} /wr\ong# - (195-196)
- 11) PL: ^I **sug!g\est**# - ^Mr P/otter# ^quite pl\ainly# that . ^your
 !m\other# ^telephoned the :d/octor# . and she ^was in a 'state

of in!toxi!c\ation# and ^it was a'bout !three o'!cl\ock# - (418-423)

- 12) PL: there ^is an!\other m/atter# which your ^lordship !m\ay think# <^m\ight h/elp# . is that . that . ^as 'I was re:ceiving as"!s\ent in 'cross-ex'amination# ^I wasn't /anxious# to ^get [dhi] . 'medical . "!"c\ards# ^from the !m\inistry# (534-540)

Concerning the judge, he is the participant who utters comparably more low expressions and the number of his median expressions, unlike those of the other two participants, equals that of high ones. This distribution reflects the cautiousness with which he carries out the task of finding out the truth as far as possible:

- 13) JU: *well I ^didn't 'say the* d\octor# was to ^come 'forthw/ith# - [? w@w@?] he ^seems to have :acted 'rather pre!c\ipitately# - (521-523)

4.4. The DEBATE

The epistemic expressions in the DEBATE total 82; that is to say, their frequency is considerably higher than in the SERMONS, and lower than that of the VERDICTS and the CROSS-EXAMINATION. These differences can easily be accounted for: if we compare the SERMONS with the DEBATE, both texts are similar in that the low expressions are considerably fewer than the high ones. This is not surprising, since in both texts the participants have to be persuasive towards the audience. However, these texts are dissimilar in that the DEBATE displays a significantly larger proportion of median expressions, as well as of subjective expressions of all degrees or probability and of intersubjective high and median expressions. This distribution is due to the fact that, in contrast to the SERMONS, the DEBATE is heteroglossic. It is not a monologue, but a dialogue, and one in which the participants need not (and commonly do not) share one another's opinions. The speakers, therefore, have to give the impression of being tolerant. Hence the frequent use of median subjective expressions such as *I believe/ think/ should have thought*: an example of this stance is (14), in which the speaker sets forth his view of the reasons why the British are supporting a German weapons company:

- 14) ^I would have th\ought# that ^we "!"are supporting the [?] the Krupp \empire# - [...] but I be^lieve that we !\are beginning to supp/ort / it _Ted# - be^cause we've :got [@] . the :fear of :communists / under our b\eds# . (669-675).

In their turn, intersubjective high and median expressions such as *of course*, *obviously*, *apparently* and the verb *seem*, are used to indicate that the speaker's epistemic judgements can easily be shared in view of the evidence available. Concerning the low degree, the high proportion of subjective expressions is accounted for by the 10 occurrences of *I don't know* plus *I wouldn't know*, which suggest that the speakers are often ready to admit the limitations of their knowledge. This attitude is seldom a drawback for the speakers' persuasiveness, since the matters discussed are general issues which the participants cannot be expected to solve.

If we compare now the DEBATE with the VERDICTS, a crucial difference, which accounts for the difference in terms of frequency, lies in the much weaker concern with truth displayed by the former. In fact, many of its utterances are not empirically verifiable, and are consequently not qualified by means of epistemic expressions, but by viewpoint expressions, most often *I think* with the meaning of value judgement. This is the case of the first contributions of two of the speakers about a plan devised by the Croydon Council to evict the tenants with relatively high incomes:

15) ^I think it's a :thoroughly “:b\ad# /^pl\an# - (204-205)

16) I ^don't r\eally think# ^\any of us on this pl/atform# are
^c\ompetent# to ^j\udge# - (329-332)

A last feature which must be noted about the DEBATE is the ironic use of epistemic expressions, often in pairs or clusters. In (17), the participant Ted Leather makes a sarcastic remark about a previous statement of another speaker, and an unidentified participant takes up the joke:

17) H: and there's ^something very !f\unny about this 'rock and roll
b/usiness#- and this ^teenage squealing ab/out it#. that ^raises
these savage feelings in our ordinary. :decent br\east#

F: (laughs) ^Ted L\eather#

TL: well I ^**guess** my :ordinary :decent :br\east# is a ^little
:different than R\obert's#

?: I ^**bet** it \is#

[laughter from the audience] (78-85)

4.5. The ACADEMIC CONVERSATIONS

The epistemic expressions in the ACADEMIC CONVERSATIONS total 147. That is to say, its number is remarkably higher than that of all the previous

texts. A factor which accounts for this quantity is the degree of planning, which is considerably lower and allows for short stretches with several epistemic expressions. For instance, in (18) the two academics are talking about the re-structuring of the School of Yiddish at their university; speaker B had an opinion contrary to that of a colleague called Mallet, and was supported by another colleague, Steven Peel. Both speakers are speculating about how speaker A got to know Peel's support for speaker B:

- 18) A: *[^]Steven* Peel sup!p\orted you# .
 B: [^]y\es# . most [^]c\urious#
 A: now [^]where did I hear th\at _from#
 B: [[@]] (([^]probably me)) on the ph/one _was it# - it was the [^]day
 \after# - *[^]on ((my 1 syll)) [[@]]* [^]when I r=ang# ((and)) we
 and we
 A: *[^]m\ay have been# - [^]m\ay have been#*
 B: [^]fixed up to meet *((in our h\ouse#))* - [...] [[@]] [^]as I ***think**
possibly*
 A: *(([^]may have been this))* was from :Ch\irk people that {[^]t=old
 B: [^]perhaps it !w\as#
 A: ((it's)) [^]much more r\ecently than th/at# [^]may have been Ivor
 !B\ond _told me# . (ACADEMIC CONV. A, 85-103)

Subtext A has by far the highest number of epistemic expressions of all the degrees. This is not surprising, since its length (885 tone units) is more than double that of Subtexts B and C (328 and 250 tone units, respectively). The number of epistemic expressions in Subtexts A and B is proportional to their number of words; however, in Subtext C they are significantly fewer. This difference is mainly due to field: most tone units in the latter cover a description of the present structure of the so-called academic council, something factual rather than speculative. Similar differences related to field are also found within stretches of the other two subtexts, most noticeably Subtext A: epistemic expressions are especially frequent when the utterances concern future events, which cannot be totally certain (19), or an absent colleague's thoughts or feelings, an issue which lends itself to the use of these expressions due to the lack of direct access and to the need to be tactful (20):

- 19) (the speakers are comparing the possible results of two future financial policies)
 B: and I'd [^]rather have ((it some)) :ten million in the :h\and# than
 than than [dh@] [^]one million in the !b\ush#;*. *.; [^][@:m]**
[^]but
 A: *[^]y=es#* **[^]yes of c=ourse#** /

B: I :think this is !highly un:l\ikely# . and [@] ^\I ^\I((‘m)) .
^{\I’m} . !personally# as^s\uming# that [[:] a ^million in
the !bush is more [?] is more . *!likely* to !h\appen#
(ACADEMIC CONV. A, 395-402)

20) (the speakers are talking about a renewal of a money allowance
which was rejected unexpectedly)

B: this is ^over [dhi:] re*’newal . for two !y\ears#*

A: *^over ^y\es# the re^n\ewal . * for {^two y\ears#}# -

B: ^y\es# ^this I think :{\Oscar} feels \also# ((or)) *^so* I
:g\athered#+from . ^\Alec# on the ^ph\one (ACADEMIC
CONV. A, 149-156)

Concerning the degree of probability of the epistemic expressions, the most remarkable distributional features are the large number of median expressions within Subtext A, and the opposite trend shown by Subtext B, in which median expressions are outnumbered by both high and low ones. This difference is also due to field: Subtext A contains discussions about future academic policies; the speakers are moderately assertive in order to have an influence on each other’s views, but, so as not to appear intrusive, they need to express their opinions within a heteroglossic perspective, mostly by the use of *I think* (29 occurrences). Contrariwise, two of the topics of Subtext B (a discussion about the suitability of one of the candidates for a teaching post, and the search for a person to do another job), lend themselves to genuine hypotheses and speculations, since the participants do not have much knowledge of the persons they are talking about. Hence the large number of low degree expressions. The frequency of high degree expressions, which may be surprising at first sight, is accounted for by the 5 occurrences of *certainly*, which indicate firm knowledge on isolated issues within a general feeling of doubt.

A final feature which must be commented is the subjectivity of the 5 expressions totalling the median and low degrees in Subtext C. These expressions are two instances of *I don’t know* and three of *I thought*, all but one uttered by the same speaker, who acknowledges the other’s role of privileged knower about the structure of the academic council.

4.6. The INFORMAL CONVERSATION

The INFORMAL CONVERSATION contains 125 epistemic expressions; its total number is therefore higher than that of all the texts except for the ACADEMIC CONVERSATIONS. It should be noted that this text is slightly

longer than the others because there were two non-surreptitious participants whose contributions were not counted (these contributions total 261 tone units, i.e. 17.85 % of all in the text). Even so, the proportion of epistemic expressions is comparable to that of the VERDICTS and the CROSS-EXAMINATION, in spite of the much weaker concern with truth. This is due to the lower degree of preparation of this text, which allows for clusters of epistemic expressions in short stretches of dialogue, in a similar way as the ACADEMIC CONVERSATIONS. This spontaneity can be illustrated in (21), in which two speakers are speculating about the sound of the Japanese words that an absent friend uttered on a certain occasion:

- 21) C: **^Tm !!sure** he 'said [mush m\ush]# he **^m\ay** have 'done# .
 A: ^well he **”!probably** 'speaks with a 'bit of an accent#+
 C: +^well . _it was -+ ^it was _[sho:]
 d: (- - laughs)
 C: it **^w\asn't** ['mushi'mushi]# **^Tm !!sure# Tm ^sure** it was
 ^[mushm\ush]# cos it ^sounded so like :mush !m\ush# you
 ^kn/ow# ^as in driving sl\eiigh dogs# a^cross the frozen
 w\astes# - (1241-1252).

With respect to probability, the number of high, median and low degree expressions are 51, 54 and 20, respectively; that is to say, the expressions of the first two types are predominant. Among the high ones, I will mention the 8 occurrences of *must*, the majority of them occurring when the participants are speculating about how worms learn about edible or poisonous fruit. A more pervasive feature is the high number of certain devices, such as *indeed*, *of course* and *I know* (6, 6 and 7 occurrences, respectively), which are often used to express agreement with what another speaker said previously, thus laying emphasis on shared knowledge. As regards the median degree, the number of subjective expressions (28 occurrences) is almost equalled by the sum of intersubjective and neutral expressions (26 occurrences); therefore, within this degree, the proportion of subjective expressions is lower than in all the other texts except the SERMONS. These characteristics of the high and median expressions confer on this text a less heteroglossic stance than that of other texts in which subjective qualifications are more salient, such as the DEBATE, the ACADEMIC CONVERSATION A, or the defendant's contributions in the CROSS-EXAMINATION. Concerning the low degree, the predominance of subjective expressions is entirely due to the 11 occurrences of *I don't know*. In a similar way to what happened in the DEBATE, the participants seem ready to admit the limitations of their knowledge; this may be due to the relaxed atmosphere in which the conversation is being carried out in both texts (even though in the DEBATE this relaxation is obviously more artificial).

Another feature which this text shares with the DEBATE is the ironic use of epistemic expressions, of which I found no examples in the remaining four texts. In (22), the field is a book called *Bluff your Way through Music*, which was found amusing by those speakers who had read it. Speaker B makes a mock comparison with a hypothetical book about accountancy with a similar title:

- 22) B: ((presumably)) - - - ^d\arling# the ^ones that ”\aren`t a`musing# are ^things ‘like :Bluff Your ‘Way through Ac:c\ountan`cy#
c: (- - laughs)
B: cos ^that [n] :m\atters# . if ^you’re ‘trying to be an acc\ountant# . and doesn’t matter if you’re not . at all (571-577)

This sarcastic use of epistemic expressions correlates with the role of humour in general, which is more significant in these two texts than in the others. This role responds to a purpose shared by both texts and related to the relaxed atmosphere mentioned above, namely that of entertaining; obviously, there is the difference that the people to be entertained are the audience in one case and the participants in the talk themselves in the other.

5. CONCLUSIONS

The quantitative analysis of the epistemic expressions carried out above offers a panoramic view of the pervasive influence that all the traits of genre and register studied here have on the expression of epistemic modality. Concerning genre, it has been shown, as regards purpose, that the persuasive aims of the texts as a whole or of individual participants within them causes a predominance of strong epistemic expressions. Within the persuasive texts analysed here, two subtypes may be distinguished in terms of engagement: on the one hand, the essentially monoglossic texts, represented here by the SERMONS, contain few epistemic expressions, and strong probability is often conveyed by high neutral epistemic expressions. On the other, the more heteroglossic texts display a higher frequency of epistemic expressions of all the types, especially subjective; this subjectivity is frequently realised by median expressions, such as *I think* (by far the most common), *I suppose* or *I believe*. Within these heteroglossic texts, a subdivision may be made between:

A) Those (parts of) texts in which the speakers defend their own views, such as the defendant’s contribution in the CROSS-EXAMINATION and, in a more relaxed way, the DEBATE and the ACADEMIC CONVERSATION

A. These texts display a strong predominance of subjective expressions, especially those belonging to the high and median degrees.

B) The VERDICTS, in which the interpretations of the facts proposed by the judges are easily questioned by some of the people concerned; for this reason, the speakers have to formulate their statements with a high degree not only of personal commitment but also of well-groundedness, and consequently heterogloss is conveyed by both subjective and intersubjective expressions.

Still within purpose, an important difference has been found between the texts aiming to entertain the audience or the participants (i.e. the DEBATE and the INFORMAL CONVERSATION) and the rest: only the former contain examples of epistemic expressions used sarcastically to create a humorous effect.

As regards planning, it has been shown that a relatively low degree, such as that of the ACADEMIC CONVERSATIONS and the INFORMAL CONVERSATION, favours the occurrences of stretches of text with high density of epistemic expressions uttered spontaneously, thus contributing to an increase in the overall number of these expressions. In its turn, the need for accuracy has been proved to heighten their number in the two legal texts.

Concerning register, field accounts for many of the internal variations within some of the texts: the main examples of this influence are the significantly higher quantity of median and low degree expressions displayed in the VERDICT B with respect to the VERDICT A, as well as the differences found in the overall distribution of epistemic expressions between the three ACADEMIC CONVERSATIONS. In its turn, field may confer the role of (non-)privileged knowers to given participants: this role accounts for the predominance of subjective expressions in the defendant's contributions (in contrast to those of the plaintiff's lawyer) in the CROSS-EXAMINATION, and for the use of *I don't know* and *I thought* in the ACADEMIC CONVERSATION C.

With respect to tenor, the status of the participants is by itself an influential factor on the choice of epistemic expressions, as was evident in the deference (and the consequent use of expressions of low probability) shown by the plaintiff's lawyer towards the judge in the CROSS-EXAMINATION. However, the most important issues about its influence on epistemic modality largely overlap those concerning the traits of genre mentioned above (i.e. the individual purposes of the participants, the degree of planning and the need for accuracy) as well as the traits of field (the topic dealt with and the (lack of) privileged knowledge). As I stated above, this joint influence of field and tenor on the expression of epistemic modality provides evidence

against the claim set forth by Halliday (1978) and adopted by other systemic-functionally oriented works, that there is a systematic one-to-one relationship between the register variables of field and tenor and the ideational and interpersonal macrofunctions of language, respectively.

Finally, I have to insist on the preliminary nature of this research. Due to the large area covered by the article, the descriptions of genre, register and epistemic modality have been carried out in a very concise way (for example, certain epistemic expressions, such as *I don't know* or *surely*, have a strong pragmatic component which has been ignored here), and the findings are also fairly general. Nevertheless, I hope that at least some of the issues raised here will be useful for future more concrete and detailed work approaching the influence of genre and register on the expression of modality.

NOTES

¹ Other differences among genres, which do not seem to cause great differences in epistemic modality and will not be considered here, lie in the rigidity of schematic structure and extension of its constituents, degree of specialisation and universality.

² Some definitions of field, such as those proposed by Halliday and Hasan (1985: 12) and Martin (1992: 536) relate it to social action or global institutional purpose. However, I consider that these issues belong to genre.

³ The sex of the participants, if known, will correspond to the real speaker; if not known, it will be assigned at random.

⁴ For a more precise classification of epistemic expressions into degrees of probability, see Carretero (1995: 92-111).

⁵ Hypothetical *would* can also be used pragmatically to express politeness or tentativeness (Coates 1983: 216).

⁶ Here Nuyts' analysis differs from that proposed by Halliday (1994: 354-363) in that the latter considers that modal auxiliaries express implicit subjective modality, and adverbs, implicit objective modality. Halliday, however, does not offer solid evidence to justify this distinction.

⁷ Obviously, these expressions could be further subdivided. For example, it can be argued that *as far as I know/can see* are more intersubjective than *I think* or *I am sure*, in that the speaker explicitly refers to the evidence which has motivated his/her epistemic qualification.

⁸ Modal auxiliaries could be further subdivided according to subjectivity: for instance, *must* is more intersubjective than *will*, in that it expresses implicitly that the epistemic qualification is based on accessible evidence.

⁹ No instances of other epistemic neutral adjectives, such as *probable*, have been found in the texts.

¹⁰ The transcription conventions of the corpus are specified in Appendix 1.

Departamento de Filología Inglesa I
Facultad de Filología - Edificio A
Ciudad Universitaria
28040 - Madrid
email: fling11@sis.ucm.es

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APPENDIX 1

Transcription conventions of the corpus

The transcription conventions used for the corpus examples in this article are directly borrowed from the machine-readable version of the Svartvik and Quirk corpus, in which prosodic analysis is limited to the interventions of surreptitious speakers:

- A, B, a, b**, etc = speaker identity; surreptitious speakers are identified with capital letters, and non-surreptitious ones with small letters;
- *...***, **+...+** = simultaneous talk;
- ()**, as in (laughs) = contextual comment about non-linguistic activity;
- (O)**, as in ((yes)) = incomprehensible words, where what is said in the tape-recording is uncertain;
- #** = end of tone unit;
- ^** = onset;
- ** = falling nucleus;
- /** = rising nucleus;
- =** = level nucleus;
- √** = fall-rise nucleus;
- ∧** = rise-fall nucleus;
- _**, as in **_yes**: pitch continuance;
- :** = higher pitch-level than preceding syllable;
- !** = higher pitch-level than preceding prominent syllable;

- !! = very high pitch-level;
- ‘ = heavy stress (except in contractions, where it indicates a graphic apostrophe);
- . , as in yes . yes = brief pause (of one light syllable);
- , as in yes - yes = unit pause (of one stress unit or ‘foot’);
- [?] = glottal stop;
- [@] : schwa sound, used for muttering; lengthening of this sound is indicated by a following colon;
- [], as in [lek]: transcription of phonetic sounds not corresponding to words

APPENDIX 2

Total number of epistemic expressions of different types in the texts

A. SERMONS

	<i>Sermon A</i>	<i>Sermon B</i>	<i>Sermon C</i>	<i>Sermon D</i>	<i>Total</i>
High: Subjective	0	4	0	0	4
High: Intersubjective	2	3	2	1	8
High: Neutral	9	8	8	3	28
Total High	11	15	10	4	40
Median: Subjective	1	1	0	2	4
Median: Intersubjective	2	1	0	0	3
Median: Neutral	1	0	0	0	1
Total Median	4	2	0	2	8
Low: Subjective	0	1	0	1	2
Low: Intersubjective	0	0	0	0	0
Low: Neutral	4	0	3	0	7
Total Low	4	1	3	1	9
TOTAL	19	18	13	7	57

B. VERDICTS

	<i>Verdict A</i>	<i>Verdict B</i>	<i>Total</i>
High: Subjective	6	5	11
High: Intersubjective	10	7	17
High: Neutral	10	13	23
Total High	26	25	51
Median: Subjective	6	17	23
Median: Intersubjective	3	6	9
Median: Neutral	0	2	2
Total Median	9	25	34
Low: Subjective	0	1	1
Low: Intersubjective	0	0	0
Low: Neutral	2	13	15
Total Low	2	14	16
TOTAL	37	64	101

C. CROSS-EXAMINATION

	<i>Pltf.'s lawyer</i>	<i>Defendant</i>	<i>Judge</i>	<i>Total</i>
High: Subjective	2	17	0	19
High: Intersubjective	5	1	2	8
High: Neutral	10	5	2	17
Total High	17	23	4	44
Median: Subjective	5	16	2	23
Median: Intersubjective	4	1	2	7
Median: Neutral	0	3	0	3
Total Median	9	20	4	33

Low: Subjective	0	6	1	7
Low: Intersubjective	0	0	0	0
Low: Neutral	5	5	5	15
Total Low	5	11	6	22
TOTAL	31	54	14	99

D. DEBATE

<i>Hi. Su.</i>	<i>Hi. In.</i>	<i>Hi. Ne.</i>	To. Hi.	<i>Me. Su.</i>	<i>Me. In.</i>	<i>Me. Ne.</i>	To. Me.	<i>Lo. Su.</i>	<i>Lo. In.</i>	<i>Lo. Ne.</i>	To. Lo.	To-tal
6	7	17	30	20	7	5	32	10	2	8	20	82

E. ACADEMIC CONVERSATIONS

	<i>Ac. conv. A</i>	<i>Ac. conv. B</i>	<i>Ac. conv. C</i>	<i>Total</i>
High: Subjective	10	4	3	17
High: Intersubjective	12	2	3	17
High: Neutral	9	8	2	19
Total High	31	14	8	53
Median: Subjective	38	5	3	46
Median: Intersubjective	5	1	0	6
Median: Neutral	3	3	0	6
Total Median	46	9	3	58
Low: Subjective	1	5	2	8
Low: Intersubjective	2	0	0	2
Low: Neutral	19	7	0	26
Total Low	22	12	2	36
TOTAL	99	35	13	147

F. INFORMAL CONVERSATION

<i>Hi.</i>	<i>Hi.</i>	<i>Hi.</i>	To.	<i>Me.</i>	<i>Me.</i>	<i>Me.</i>	To.	<i>Lo.</i>	<i>Lo.</i>	<i>Lo.</i>	To.	To-
<i>Su.</i>	<i>In.</i>	<i>Ne.</i>	Hi.	<i>Su.</i>	<i>In.</i>	<i>Ne.</i>	Me.	<i>Su.</i>	<i>In.</i>	<i>Ne.</i>	Lo.	tal
11	9	31	51	28	17	9	54	11	1	8	20	125