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The Expression of Epistemicity in British Internet Discussion Forums in Contrast with Newspaper Opinion Articles and Political Speeches[1]

Abstract: This paper sets forth a quantitative analysis of expressions of epistemicity, a category covering the expression of commitment to the information transmitted, in a corpus of 25 threads extracted from British discussion forums. Epistemicity is divided into three categories: epistemic modality, evidentiality and factivity, each divided into subcategories. The results are analysed in contrast to comparable corpora of newspaper opinion articles and political speeches. The analysis uncovers significant differences in the expression of epistemicity in the three genres, in terms of both frequency and distribution across categories, the subcategory 'cognitive attitude' being a case in point. Epistemicity in the discussion forums is also proved to display features of orality and routinisation.

Keywords: epistemic modality, evidentiality, factivity, discussion forums, cognitive attitude, orality, routinisation

1. Introduction

This paper presents part of the research carried out in the STANCEDISC project,[1] aimed at the analysis of several dimensions of stance. Stance may be defined as the speaker/writer's attitude towards the information transmitted, not understood as an individual private opinion, but as "a linguistically articulated form of social action whose meaning is to be construed within the broader scope of language, interaction and sociocultural value" (DuBois 2007, 139). Stance has multiple dimensions, some of which are epistemic stance, effective stance and evaluative stance (Marín-Arrese et al. 2020, 270). This paper addresses epistemic stance (also called epistemicity), which concerns the speaker/writer's dialogical positioning in providing justificatory support for the communicated proposition (Boye 2012; Langacker 2013; Marín-Arrese 2015; 2021a; 2021b). Epistemic stance will be divided into three subtypes: evidentiality, which provides epistemic justification in terms of kind, source and/or evaluation of evidence; epistemic modality, which provides epistemic support by estimating the chances for a proposition to be or become true (cf. Nuyts 2001, 21);[2] and factivity, which concerns the factual assignment of a proposition. Throughout the paper, the label 'epistemic(ity)' refers to the larger category, while 'evidential(ity)', 'epistemic modal(ity)' and 'factive(ity)' refer to the respective categories. Evidentiality, epistemic modality and factivity are illustrated in examples (1), (2) and (3), respectively:

(1)　Reading your latest entries it **seems** <EP, IIE> you're up and down and you're drinking a bit more. (ENGF-06)[3]

(2)　BTW if you insist on ignoring what I've said so far, beg, borrow, buy, or steal a copy of "The Selfish Pig's Guide to Caring" by Hugh Marriott - it **might** <EP, EM> save your sanity, your caree's life, or even your life. (ENGF-04)

(3)　[BTW, I have a case involving a B-2 entry in 19-eighty-7 -- the government claims fraud as such: "You falsely stated you were coming to see your boy-friend. **The true fact** <EP, IFV> was that you had a home and job of three years in the United States you were returning to." (ENGF-25)

This paper reports the results of an analysis of a number of epistemic expressions in a corpus of English discussion forums, in comparison to other discourse types also covered in the STANCEDISC project, English newspaper opinion articles and political speeches, which have been analysed in Domínguez-Romero and Martín de la Rosa (2023).[4] The three genres compared have in common the British sources as well as an argumentative nature, in the sense that the main purpose of the writers is to present their opinion about controversial issues (see Section 2). The comparison aims at (dis)confirming two research hypotheses:

Hypothesis 1: epistemic expressions will be more frequent in discussion forums than in the other two genres. The reason is that political speeches and opinion

articles are explicitly delivered by non-anonymous professionals, who are supposed to be experts on the matters discussed and have to consider the ideology of the political party or the newspaper they are working for. By contrast, participants in discussion forums are anonymous and non-professional persons who need not know more about the issues discussed than the average person. A consequence of these differences is that participants in discussion forums have much fewer restrictions for expressing their voice than writers of political speeches or opinion articles. In the case of epistemicity, this lack of voice restrictions may lead to unashamed qualifications of commitment, as in example (4), extracted from a forum titled "The pros and cons of (alcohol) self-medicating", whose wording would be hardly conceivable in a political speech or newspaper opinion article:

(4)   Someone who helped me a great deal once told me that the only good thing that came from suffering with this is that we could understand and so know what to say to others.
      I suppose <EP, CGA> it is an important benefit but **I think** <EP, CGA> I will only fully appreciate that when the pain is by. (ENGF-06)

The writer uses two expressions which explicitly mention the writer as conceptualiser of epistemic judgements overtly lacking total commitment to the communicated content. The observation of occurrences of this kind leads to the second hypothesis:

Hypothesis 2: expressions of cognitive attitude, which include first person constructions, such as *I think*, *I believe* or *I suppose*, will be significantly more common in discussion forums than in political speeches and newspaper opinion articles.

The choice of the genre of discussion threads is due not only to the hypothesised high number of epistemic expressions, but also to the importance of this genre nowadays, as a popular arena for social interaction which enables voicing opinion about controversial issues anonymously (Sánchez-Moya and Maíz-Arévalo 2023). Noticeably, a number of academic studies have covered threads about burning issues such as infertility (Lee 2017), partner violence (Sánchez-Moya 2019; Nacey 2020), eating disorders (Figueras-Bates 2015), or involuntarily celibate men 'incels' (Prażmo 2020), among many others.

The structure of the paper is as follows: Section 2 describes discussion forums and threads in terms of genre and register. Section 3 addresses the types of epistemicity and their subtypes. Section 4 describes the corpus and specifies the method of analysis. Section 5 presents and discusses the results, and Section 6 sums up the main conclusions.

2. Characterisation of discussion forums and threads in terms of genre and register

An internet discussion forum is an online discussion site where people hold asynchronous conversations in the form of posted messages. Discussion forums contain threads on different topics. Discussion threads may be considered a well-defined genre, in the systemic-functional sense of "a staged, goal-oriented, purposeful activity in which speakers engage as members of our culture" (Martin 1984, 25). The characterisation of threads in terms of the three elements of the definition, namely stages, goals and culture, is as follows:

1)   As for stages, their schematic structure is simple at the highest level:
     Initiation (the initiator's turn) + Responses (all the following turns)

     Within the Responses, each contribution by a participant may be considered as a stage. Stages vary in internal complexity: a single stage commonly has more than one discourse function (for example, giving advice plus giving reasons for the advice), but their rhetorical structure lies outside the scope of this paper. Threads normally end spontaneously, not with a concluding turn, since such a turn would (most often impolitely) deter further contributions.

2)   The goals of discussion forums are also clear. The initiator aims mainly at obtaining information or opinions about a given issue, and the other participants aim at trying to help the initiator (and also other participants) by stating their opinions. In principle, participants have no other personal interests (such as getting money or favouring a given political party), although they may have subsidiary goals, such as receiving support or compliments about their view of the issue, which would enhance their need to be appreciated, i.e. their positive face in terms of Brown and Levinson (1987).

3)   Concerning culture, discussion forums do not display national or cultural differences in a comparable way to other kinds of genres such as marriage ceremonies or Christmas home parties. However, the present corpus was obtained from British sites (see Section 4), and some of the topics are British (for example, "Britain's drink problem" (ENGF-02) or "Is renting in the UK really that bad?"(ENGF-21)). The forums are open to all participants, having no restrictions of nationality or origin. Nevertheless, they may be said to have a certain 'British flavour', due to the sites, the most likely participants and some of the topics.

It must also be noted that discussion threads count as argumentative discourse rather than expository discourse, since the contributions concern controversial issues which do not lend themselves to unique viewpoints, rather than facts. In this

sense, the threads may be considered a dialogic genre, as participants are aware that their views of the issues in question need not coincide with those of other participants. However, participants wish their contributions to be appreciated. In this sense, discussion threads provide a good window to perceive the double nature of human beings (Weigand 2010, 47-48; Carretero 2014, 60). On the one hand, individuals need self-assertion; in this respect, anonymity provides a safe way for expressing personal opinions, even if they are unpopular or radical;[5] on the other hand, individuals are also social beings who need to respect others in order to be accepted in the community. Epistemic expressions are a powerful device for reconciling these different needs. This capacity is illustrated with example (5), extracted from the thread titled "Britain's Drink Problem":

(5) *Participant 1:* Anyway, **I think** <EP, CGA> people who are not responsible enough to have a drink should not be allowed to drink at all.
     […]
     Participant 2: That would be completely unenforcable.
     […]
     Participant 3: You are **probably** <EP, EM> right. Although it wouldn't be practical to enforce such a law **I** still **think** <EP, CGA> there is a genius idea out there to combat anti social binge drinking that no one has mentioned yet. (ENGF-02)

The contribution by Participant 1 may be interpreted as giving priority to the need for self-assertion, since the idea is radical indeed, and uses *I think* to acknowledge that it is his/her opinion, and that not everyone shares this opinion. Participant 2 straightforwardly opposes the idea on the grounds that it is unenforceable, but Participant 3 uses epistemic expressions to assess the idea as not totally lacking common sense, thus fulfilling Participant 1's social need that his/her contribution should be considered.

The other two genres considered, newspaper opinion articles and political speeches, are also argumentative, since the writers' main aim is to present their viewpoints about given issues, acknowledging that there are other possible views but trying to persuade readers that the view they propose is better. However, these genres differ from discussion forums in that writers are not anonymous and are more conditioned by the lines of the corresponding newspaper or political party and also by the interest to acquire or maintain prestige in the institution they work for or belong to. Therefore, they are more cautious in the way they express their messages, which, I believe, will be reflected in the expression of epistemicity.

In terms of register, discussion threads may be characterised as follows by means of the dimensions of field, tenor and mode (Eggins 2004, 90–109):
–   As for field, namely the entity or activity about which the text is concerned, discussion threads are variable, since they cover different topics.

–   Concerning tenor, namely the social role relationships between interactants, participants may be considered to have equal power, with the caveat that, concerning expert power (Spencer-Oatey 2000, 33), the initiator may consider him/herself to be less knowledgeable or experienced about the issue in question than the prospective responders, thus considering them superior. There is no contact between participants, since they do not know one another, but they express affective involvement through the use of informal language.
–   With regard to mode, discussion threads are characterised as an instance of asynchronous computer-mediated communication (Marcoccia 2003).

3. Types of epistemicity

As stated in Section 1, epistemicity is approached as the speaker/writer's dialogical positioning in providing justificatory support for the communicated proposition (Boye 2012; Marín-Arrese 2021a; 2021b; Carretero, Marín-Arrese, and Lavid-López 2017; Marín-Arrese and Carretero 2022; Domínguez-Romero and Martín de la Rosa 2023). As stated in Section 1, epistemicity is divided into evidentiality, epistemic modality and factivity. In their turn, each of these categories is divided into subtypes. The division is as follows:

A) The subtypes of evidentiality have been established according to the mode of access to the evidence (Marín-Arrese 2015; 2017; Carretero, Marín-Arrese, and Lavid-López 2017):

Indirect-inferential evidentiality (IIE). In this type, the mode of access to the evidence is indirect, through inferences by the speaker/writer based on their personal access to evidence. The evidence may be obtained through one or more evidential bases (Izquierdo-Alegría 2016, 64–67): perception, cognition, or (spoken or written) communication. Some expressions of IIE are certain occurrences of the verbs SEE, SEEM, APPEAR, LOOK and SUGGEST, the adverbs *evidently* and *obviously*, and the adverb *clearly* with evidential meaning, in contrast to the meaning of manner (as in "She spoke clearly").[6] An example of IIE is (6), extracted from a thread about trading with China:

(6)   I am sorry to say that too many people **seem** <EP, IIE> to forget that they are risking their own money and their own future in any new venture. (ENGF-09)

Indirect-reportative evidentiality (IRE). The mode of access is also indirect; it consists in epistemic justification based on communicative spoken or written messages, without further inference. IRE is difficult to distinguish from reported speech, understood as the attribution of information to an external communicative source with varying degrees of faithfulness. According to Chojnicka (2012), who

proposes a continuum between the two categories, the main aim of reported speech is the attribution of information to an external communicative source (with varying degrees of faithfulness), while the main aim of reportative evidentiality is to mark information as "coming from another speaker(s)" (2012, 173). In this paper, reporting verbs will be considered to be markers of reportative evidentiality only if the communicative source is not explicit, i.e. in the passive voice, as in (7), or with a non-specific source such as *people*, *everyone* or generic *they*.

(7)   I am waiting for an appointment to come through to get some therapy for myself to deal with all of the above, but **I've been told** <EP, IRE> the waiting list is very long (ENGF-03)[7]

B)   The expressions of epistemic modality are divided into the following subtypes:

Epistemic modality "proper" (EM), which consists in the expression of degrees of certainty for a given proposition to be or become true. Expressions of EM are the modal auxiliaries when they have epistemic meaning, and adverbs such as *certainly*, *probably*, *perhaps* and *maybe*:

(8)   Hi mate the CANTON FAIR is coming and there will have tons of suppliers attend it, **maybe** <EP, EM> you can find some sppliers at there,Just ask uncle google for some informations, It will start at the middle of April. (ENGF-09)

Cognitive attitude (CGA): the expression of beliefs regarding the truth of a proposition. Sample expressions of CGA are first-person occurrences of verbs of thought such as THINK, BELIEVE or SUPPOSE (see example (9)), and adverbs or adverbials such as *undoubtedly*, *no doubt, without doubt, presumably* or *supposedly*. The construction SEEM + *to me* has also been considered as CGA, since the explicitness of the conceptualiser makes it more akin to *I think* or *I believe* (Marín-Arrese, Carretero, and Usonienė 2022, 68–69).

(9)   **I think** <EP, CGA> we're the only people not having issues with CHC funding, as we've never even had to "fight our corner" regarding fees for anything care-related. **I do believe** <EP, CGA> the nursing home charges small fees for things like hairdressing, but this is to be expected and we're more than happy to pay for it. (ENGF-03)

C)   The subtypes of factivity are the following:

Personal Cognitive Factivity (PFV), which covers the expression of the speaker/ writer's strong commitment to the truth of the proposition, which is presented as

knowledge. The most frequent expression is the verb KNOW in the first person; other resources are expressions such as *I/we can tell/say*:

(10) **I know** <EP, PFV> in my heart of hearts that I myself am not ready for a new relationship because I would probably <EP, EM> end up hurting myself and the other person. (ENGF-07)

Impersonal Cognitive Factivity (IFV), which covers speaker/writer's commitment to the truth status of the proposition presented as a truth or fact. Sample expressions are *in fact*, *in truth*, *the fact/truth (is) that*…

(11) As a Christian yourself, you might appreciate that the teachings of Jesus were an improvement on the often barbaric traditions of the Old Testament (**in fact** <EP, IFV> they were so controversial at the time that they cost Jesus his own life!). (ENGF-01)

4. Data and method of analysis

4.1 The corpus

The corpus under analysis is part of the English corpus of discussion forums compiled in 2019 by Carmen Maíz-Arévalo and Alfonso Sánchez-Moya.[8] The corpus consists of posts extracted from different British sites from complete forum threads. The contributions were posted between 2006 and 2019. The following criteria were considered for the compilation:

–   All the forums included the extension co.uk in their web address, in order to ensure that they belonged to the United Kingdom, with the caveat that it is not possible to guarantee that all the posts were sent from UK or by Britons. This feature favours comparability with the other two subcorpora, which were obtained from British newspapers and political parties.
–   In order to comply with the ethical issues of privacy and anonymity, all the forums were publicly accessible and available, not password-protected, and the writers of the posts were anonymous.
–   The maximum number of threads of the same forum is two, so as to prevent possible biases caused by the style of any specific forum.
–   The threads have a wide range of different topics, such as social issues, business, culture, environment, education, immigration, sports and leisure, etc.
    For the present paper, 25 threads have been selected, discarding the 'soft' topics of sports and leisure for the sake of comparability, since neither the opinion articles nor the political speeches have these issues as main topics. Sample titles of the selected threads are "Threatening gay marriage", "Britain's drink problem",

"Climate change and diseases" or "Tenancy deposit rules fixed". The total number of words of the texts are 96,256. The distribution of threads and words across topics is summarised in Table 1.

Table 1. Distribution of threads and words across topics in the selected corpus

Topic	No. of threads	No. of words
Society – Social issues	6	26,974
Business	2	20,049
Culture	3	14,476
Career	2	11,731
Environment	2	8,792
Immigration	2	5,119
Housing	2	3,168
Technology	2	2,548
Education	2	2,058
Wedding	2	1,341

The metadata of the selected threads are specified in the Appendix. In many cases, posts contain citations of previous contributions, which indicate the precise stretches of previous posts to which responses are addressed. These citations have been deleted for the quantitative analysis of epistemic expressions. The corpus without the citations totals 80,293 words.

4.2 Method of analysis

A search was carried out on a number of expressions (markers) of epistemicity, which, for the sake of comparability, coincide with those selected in Domínguez-Romero and Martín de la Rosa (2023) for the analysis of the English subcorpora of newspaper opinion articles and political speeches.[9] The search includes the following expressions:

A)   Expressions from the domain of perception:
–   Verbs which may have the conceptualiser as Subject in the active voice: SEE and HEAR;
–   Verbs with constructions that impersonalise the perceiver: SEEM, APPEAR, LOOK (*like*) and SUGGEST ("this suggests that…");
–   the adverbs *apparently*, *clearly*, *evidently*, *obviously* and *seemingly*.

B)   Expressions from the domain of cognition:
–   the verbs THINK, BELIEVE, SUPPOSE, DOUBT and KNOW;
–   the adverbs or adverbials *supposedly*, *presumably*, *no doubt*, *undoubtedly*, *without doubt*.

C)   Expressions from the domain of communication:

–   the verbs SAY, TELL, REPORT, ALLEGE, CLAIM, SUGGEST;
–   the adverbs *allegedly* and *reportedly*.
D)   Modal verbs and adverbs:
–   modal auxiliaries: *must*, *may*, *might*, *could*;[10]
–   epistemic modal adverbs: *certainly*, *probably*, *perhaps*, *maybe*;
–   2 nouns of factivity: *truth* and *fact*.

The search on the expressions listed above was manual, for two reasons. Firstly, epistemic and non-epistemic occurrences had to be discriminated for many of the expressions. Examples of discarded occurrences were those of the modal auxiliaries with deontic or dynamic meanings, *clearly* with the meaning of manner, the verbs SEE and HEAR scoping over non-finite clauses (see Note 7), or non-clausal constituents (as in "a couple of friends went to see him in the pub", ENGF-02), the verb SAY introducing direct or indirect reported speech, or the verb KNOW occurring as part of the discourse marker *you know*.

Secondly, many expressions may belong to different categories, depending on the linguistic context. For example, the verb KNOW is a PFV marker when it categorises the information transmitted as knowledge and a CGA marker when it expresses limitation of knowledge, as in *I don't know* and *so far as I know*. In a similar fashion, the verb SAY belongs to the CGA category in (12) and to 1RE in (13):

(12) **I would say** <EP, CGA> it is risky buying from overseas manufacturers anywhere in the world, not just China. I'm sure you can find ligitimate manufacturers from Alibaba, but it's difficult telling the frauds from the ligitimate. **I would say** <EP, CGA> the only way to pay is via Paypal as they do provide some security. **I would say** <EP, CGA> avoid any company which doesn't have Paypal as an optional payment method. (ENGF-09)

(13) **It is** often **said** <EP, IRE> that carers are slaves ... slaves to the system perhaps <EP, EM> but ... not necessarily to their carees? (ENGF-03)

The actual expressions found for each type and subtype of epistemicity, together with the number of occurrences, are included in the discussion set forth in Section 5.

5. Results and discussion

This section presents and discusses the results of the analysis of epistemicity in the selected threads of discussion forums, in contrast to the subcorpora of newspaper opinion articles and political speeches. The first subsection (5.1.) covers the overall frequency of the epistemic expressions and their subtypes across the three genres; the following subsections (5.2. to 5.7.) describe the realisations of the

different subtypes of epistemicity in the discussion forums analysed, including observations about the occurrences of some expressions in the forums and in the other two corpora for comparative purposes.[11] The last subsection (5.8.) rounds off the discussion with an overall perspective of the findings.

5.1 Overall frequency of epistemic expressions and their subtypes

The total number of epistemic expressions in the discussion forums is 638. This frequency was compared with that of the corpora of newspaper opinion articles and political speeches by means of a one-sample chi-square test using the observed and expected frequencies on the basis of the null hypothesis of no preferential association. The results, specified in Table 2, confirm Hypothesis 1, since the differences in the distribution of epistemic expressions across the three genres are proved to be significant.

Table 2. Total number and expected frequencies of epistemic expressions in discussion forums, newspaper opinion articles and political speeches

	Discussion forums (80,293 words)		Newspaper opinion articles (100,699 words)		Political speeches (100,985 words)	
Epistemic expressions	Total no.	Expected frequency	Total no.	Expected frequency	Total no.	Expected Frequency
	638	469.27	654	588.53	356	590.20
	$\chi 2= 160.88$, df = 2, p < .001					

These numbers, together with the respective ratios per thousand words (7.95 for discussion forums, 6.50 for opinion articles and 3.53 for political speeches), uncover that the difference between the frequency of epistemic expressions in discussion forums and opinion articles is much smaller than the difference between these two discourse types and political speeches. According to Domínguez-Romero and Martín de la Rosa (2023, 95), the abundance of epistemic expressions in opinion articles

> seems to imply the need to evoke a journalist conceptualizer who can better connect and engage with the readership through open statements (1) to accommodate the different views of readers and (2) share some responsibility with them while negotiating meaning.

Authors of posts in online forums seem to share this need to evoke the conceptualiser with journalists. Consequently, they both tend to perspectivise their messages as heteroglossic, in the sense that the locution is represented "as but one view among a range of possible views. […] to recognise that the text's communicative backdrop is a diverse one" (Martin and White 2005, 99). Epistemic expressions are a major

device for providing this heteroglossic perspective, by acknowledging that there are other possibilities apart from the one presented in the modalised clause.

The total number of epistemic expressions of different types across the three genres is specified in Table 3. According to the chi-square test of independence, the distribution displays significant differences. Especially remarkable is the frequency of CGA expressions in the discussion forums, whose occurrences almost double those in the political speeches and quadruple those in the opinion articles. Hypothesis 2 is therefore confirmed.

Table 3. Number of expressions of the different types of epistemicity in the three genres

Type of epistemicity	Discussion forums (80,293 words)	Newspaper opinion articles (100,699 words)	Political speeches (100,985 words)
	Total no.	Total no.	Total no.
IIE	105	127	30
IRE	17	27	5
EM	270	398	127
CGA	177	47	96
PFV	41	11	79
IFV	28	44	19
$\chi 2 = 273.53$, df = 10, p < .001			

The difference in the number of CGA expressions between the forums and the opinion articles is remarkable, considering that both genres share the need for heteroglossic statements. However, writers in both genres differ in the power relationship between them and their audience. As was stated in the Introduction (Section 1) and in the account of tenor provided in Section 2, participants in discussion forums may consider themselves as equals to their readers, while authors of opinion articles are supposed to have expert power (Thomas 1995, 127-128) over readers. For this reason, discussion forums contain more occurrences of expressions such as *I think*, *I believe* or *I suppose*, which confer a subjective flavour to the epistemic judgement due to the explicit mention of the writer. By contrast, authors of newspaper opinion articles tend to restrict the use of expressions of this kind. This finding agrees with Marín Arrese's (2017) claim that, in newspaper discourse, direct evaluations are avoided, more impersonal formulations being preferred.

Another fact worth commenting is that discussion forums do not display the lowest number for any of the categories, but always display either the highest or the second highest number. Therefore, the forums do not have poorly represented categories in comparison to the other two genres.

The three subcorpora share the distributional traits that EM is by far the most

frequent type and that IRE expressions are scarce. As for the remaining subtypes, the frequency of IIE expressions in the discussion forums and opinion articles is roughly similar, with ratios per thousand words of 1.31 and 1.26 respectively, and so is the frequency of IFV expressions, the respective ratios being 0.35 and 0.44. The number of PFV expressions in the discussion forums lies in the middle between the low number shown by the articles and the highest number of the political speeches, which agrees with the characterisation by Domínguez-Romero and Martín de la Rosa (2023: 96) of these speeches as "more reflective and personal" in comparison to newspaper opinion articles.

5.2 Evidential indirect-inferential expressions (EP-IIE)

The 105 occurrences of IIE in the forums are mostly realised by verbs. Within this word category, there is a strong predominance of verbs from the domain of perception that impersonalise the perceiver. The most common verb is by far SEEM, which totals almost half the occurrences: there are 60 cases of *seem, seems* and *seemed*, but no cases of *seeming*. The other verbs, APPEAR, LOOK and SUGGEST, display 9, 3 and 2 occurrences, respectively. This high frequency of verbs of this type for the expression of IIE is also present in the other two subcorpora.

As for verbs that may have the perceiver as subject in the active voice, SEE occurs 12 times. The conceptualiser is nearly always explicit, with 8 occurrences of *I see* and one of each of *I can see* and *I've seen*. No occurrences of *we see* were registered, which means that writers do not often include readers (or people in general) when making the conceptualiser explicit. There is only one occurrence of the verb SEE as IIE without explicit conceptualiser (*it's difficult to see*). The verb SEE is less common in the other two subcorpora (5 occurrences in the opinion articles and 4 in the political speeches), with only one occurrence in the first person singular for each subcorpus. This distribution provides additional evidence that participants in discussion forums are more prone to explicitly mention themselves as conceptualisers of epistemic judgements than authors of opinion articles.

The adverbs are comparably less frequent, the occurrences of *obviously*, *clearly* and *evidently* totalling 12, 8 and 1, respectively. The higher frequency of *obviously* in comparison to *clearly* makes a difference between the forums and the opinion articles, which total 16 cases of *clearly* and only 2 of *obviously*. This difference brings the discussion forums nearer spoken discourse, if we consider that, according to research on epistemic adverbs, *clearly* is more common in written corpora and *obviously* in spoken corpora (Carretero, Marín-Arrese, and Lavid-López 2017: 41-42; Rozumko 2019, 587). As for the political speeches, there are no occurrences of *clearly* and there is only one of *obviously*.

5.3 Evidential indirect-reportative expressions (EP-IRE)

The 17 occurrences of IRE in the discussion forums are distributed as follows: 7 of *apparently*, 5 of the verb SAY with generic subject or in the passive (*people say*, *they say*, *it is said*), 4 of TELL with the writer as subject of the passive voice (*I have been told*, *I was told*), and one with the verb SUGGEST (*research suggests*). Noticeably, no cases were found of the verb HEAR with reportative value, nor of *allegedly* and *reportedly.* According to Marín-Arrese, Carretero, and Usonienė (2022, 75), the two adverbs are much more frequent in newspaper discourse than in spoken discourse. This absence in the discussion forums may then be considered to bring them closer to spoken discourse in comparison to the opinion articles.[12]

5.4 Epistemic-modal 'proper' expressions (EP-EM)

The EM expressions, which constitute the most common group, are realised by the modal auxiliaries *must*, *may*, *might* and *could* and the epistemic-modal adverbs *certainly*, *probably*, *perhaps* and *maybe*. The total number of EM expressions is 270, of which 144 are adverbs and 126 are modal auxiliaries. The frequencies of modal auxiliaries and adverbs are specified in Table 4, which shows that the epistemic adverbs as an overall category are slightly more frequent than the modal auxiliaries.

Table 4. Number of EM expressions in the discussion forums

Expression	Discussion forums (80,293 words)
	Total no.
Must	14
May	49
Might	42
Could	21
Total epistemic modal auxiliaries	126
Certainly	15
Probably	57
Perhaps	24
Maybe	48
Total epistemic modal adverbs	144
TOTAL	270

Concerning the modal auxiliaries, *must* is less frequent than the three adverbs of lower probability *may*, *might* and *could*. It has to be noted, though, that epistemic *must* occurs 14 times in the discussion forums, but only 4 times in the newspaper opinion articles and never in the political speeches. This relatively higher frequency

of epistemic *must* in the discussion forums may be interpreted as one more feature that brings them nearer spoken language: according to Biber et al. (2002, 494), *must* in conversation is most often used to express logical necessity (i.e. epistemic modality), while in academic prose, this modal is more common with the meaning of personal obligation.

As for the adverbs, the most common in the forums is *probably*, which expresses medium commitment, followed by the low-commitment adverbs *perhaps* and *maybe*; the high-commitment adverb *certainly* is less common. In order to check whether this distribution is comparable to those of the opinion articles and the political speeches, a comparative quantitative analysis was carried out. The frequencies were submitted to the chi-square independence test (see Table 5), which proves the distributional differences to be significant. The totals show that *probably* registers the greatest cross-genre difference, and that all the adverbs are scarce in the political speeches and most frequent in the forums. As for the adverbs expressing lowest epistemic commitment, the forums prefer *maybe* over *perhaps* while the opposite is true for the opinion articles. Considering Rozumko's (2019, 588) observation that these four adverbs display a higher normalised frequency in the spoken than in the written part of the *British National Corpus*, the quantitative data once again provide evidence that discussion forums have a higher degree of orality compared to opinion articles.

Table 5. Frequency of the epistemic adverbs *certainly*, *probably*, *perhaps* and *maybe* in the three genres

Adverb	Discussion forums (80,293 words) 144 adverbs	Newspaper opinion articles (100,699 words) 98 adverbs	Political speeches (100,985 words) 16 adverbs
certainly	15	11	4
probably	57	18	3
perhaps	24	53	9
maybe	48	16	0
$\chi2= 50.2898, df = 6, p < .001$			

5.5 Expressions of Cognitive Attitude (EP-CGA)

As for CGA, as was stated earlier, these expressions are significantly more frequent in the discussion forums than in the other two genres. The majority of the expressions specify the writer as the conceptualiser of the epistemic qualification: the most common expression is by far *I think*, which occurs 93 times as such and 125 times including other constructions with this verb, i.e. negative occurrences (*I don't think* / *I do not think…*) and alternatives such as *I really think*, *I still think* or *I like to think*. The expression of the category CGA may then be considered to

be highly routinised, with the overwhelming presence of *I think* resembling the results of Kärkkäinen's (2003) analysis of epistemic stance in American English conversation.

Other expressions which specify the writer as conceptualiser are *I would say / I'd say* (12 occurrences), *I believe* (7 occurrences, including affirmative and negative cases), *I suppose* (7 occurrences), *I don't know* (4 occurrences), *as/so far as I know* (3 occurrences), and other expressions occurring once or twice: *I suggest, I doubt, I'm not sure, I can't say, so far as I can tell, seems to me*. There is also an occurrence of the more creative expression *my head says*.

This frequency of the explicit conceptualiser in the first person singular contrasts with the few cases of explicit conceptualiser in the first person plural, with only 3 occurrences of *we think*. Also rare are the adverbials, with 4 occurrences of *no doubt* and one occurrence of each of *presumably, supposedly* and *undoubtedly*.

As for the expression of CGA in the newspaper opinion articles and political speeches, the expressions with explicit conceptualisers also play an important role within the category, according to Domínguez-Romero and Martín de la Rosa (2023, 83). Then, the cross-genre difference for this category is quantitative rather than distributional. As stated earlier, the higher frequency of these expressions in discussion forums provides evidence that participants in this genre are more inclined to formulate epistemic judgements explicitly indicating their role as conceptualisers than writers in the other two genres, especially in the case of the newspaper opinion articles.

5.6 Expressions of Personal Factivity (EP-PFV)

The most common expression of PFV is *I know*, which totals 27 occurrences out of the 41 PFV expressions; therefore, the expression of this category is also quite routinised. There are other 5 occurrences of the verb KNOW in the first person (*I just know, I was relieved to know, I do know…*). Another expression with the conceptualiser in the first person is *I can tell* (2 occurrences). Expressions with the conceptualiser in the first person plural total 7, thus being comparably more represented than in the category of Cognitive Attitude; these expressions include 4 cases of *we know* and one of each of *we also know, sometimes us non-gypsies know* and *those of my generation know*.

This predominance of the verb KNOW is also present in the genre of political speeches, where the category of personal factivity is almost twice as frequent as in the discussion forums, with *I know* and *we know* totalling 54 out of the 79 occurrences. The distribution of this verb in the two genres differs in that the political speeches display more cases of *we know* (30 occurrences) than of *I know* (24 occurrences).[13] It may be said, then, that KNOW in forums is more often used to signal the information given as personal knowledge; in political speeches, however, it serves more often to claim common ground, which often concerns the ideology or aims

of the corresponding political party. An instance of this use is found in example (14), extracted from a Labour Party speech, which shows the party's concern that children in disadvantaged environments should be provided with more opportunities to develop their potential.

(14) **We know** <EP, PFV> the earliest years are a crucial time to open up children's life chances. Yesterday I visited the Greenhouse nursery in Liverpool and heard their experiences. But across the country, nurseries can't make ends meet and youth clubs and nurseries are closing.

By contrast, the verb KNOW expressing factivity is scarce in the newspaper opinion articles, where *I know* and *we know* together only sum up 5 occurrences.

5.7 Expressions of Impersonal Factivity (EP-IFV)

This category, which totals 28 cases, is nearly always realised with the noun *fact*, with 12 cases of the discourse marker *in fact* and 14 occurrences including the noun *fact*, such as *the fact* (8 occurrences), *a fact*, *this is fact*, and other occurrences where the noun *fact* is premodified (*the mere fact*, *the true fact*, *a known fact*, *unfortunate fact*). The remaining 2 occurrences contain the noun *truth*: *in truth*, *truth be told*.

Concerning the frequency of *in fact* across the three genres, 13 occurrences were found in the newspaper opinion articles; its frequency is then higher than in the discussion forums in absolute terms, but proportionally lower within the realisations of the IFV category, which totals 44 occurrences. As for the political speeches, only 2 occurrences were found. This higher proportion of *in fact* in the forums than in the opinion articles may again be considered as a feature of orality, since its normalised frequency in the spoken part of the *British National Corpus* doubles that of the written part of this corpus (0.30 versus 0.15 occurrences per thousand words).[14]

5.8 Overall discussion of the results

The results of the analysis of the expressions of epistemicity carried out above have uncovered that, in the discussion forums, they display a slightly higher normalised frequency than in the opinion articles and a much higher normalised frequency than in the political speeches. In addition, all the subcategories of epistemicity are well represented in the forums in comparison to the other two genres; in fact, the forums did not display the lowest frequency for any of the subcategories under analysis.

This richness of epistemic expressions in the forums across categories seems

largely due to a number of features that characterise this genre. One of these features, which forums share with opinion articles, is the need felt by writers to opt for open statements rather than categorical statements in order to connect and engage with the readership by accommodating different worldviews. This feature is not so obvious in political speeches, in which writers tend to defend their worldviews more straightforwardly and unashamedly, influenced by the ideology and/or interests of the corresponding political party. This difference accounts for the higher frequency of IIE and EM expressions in the forums and opinion articles than in the political speeches, since the expressions included in these categories mostly express tentative epistemic qualifications with medium or low commitment to the information transmitted.

A second feature, which discussion forums seem to share with political speeches but not so much with opinion articles, is the need to opt for expressions that highlight personal reflection. This difference accounts for the higher numbers displayed by the CGA and PFV categories for the forums and political speeches than for the opinion articles. However, there are differences between the forums and the political speeches in the distribution of these two categories. In the forums, CGA expressions are more than four times as frequent as PFV (177 vs. 41 occurrences); this is due to the need felt by participants to have an open approach to different worldviews, which lead them to strongly prefer *I think* over *I know*. Moreover, the forums contain many more occurrences of the explicit conceptualiser in the first person singular than in the first person plural, which indicates that participants favour the presentation of their worldviews as their own rather than as shared with other readers. By contrast, in the political speeches CGA is still more frequent than PFV, but the difference is much smaller (96 vs. 79 occurrences), which is coherent with the need to display adherence to the worldviews advocated by the corresponding political party; these views are often presented as common ground using the first-person plural expression *we know*.

A third feature of the expression of epistemicity in the discussion forums is its stronger resemblance to the expression of epistemicity in spoken discourse in comparison to the other two genres, even if political speeches are written to be spoken. Two kinds of evidence point towards this consideration. Firstly, some categories are realised very frequently by one or two expressions, while the other expressions are much less common; this distribution indicates a high degree or routinisation (cf. Kärkkäinen 2003): examples of frequent expressions are the verb SEEM for IIE, *I think* for CGA, *I know* for IFV and *in fact* for PFV. And secondly, the discussion forums display a higher number of expressions proved by other research to be more common in spoken language than in written language: the distribution of expressions in the category EM is a case in point, due to the comparably higher frequency of epistemic *must* and of the adverbs, in particular *probably*.

6. Conclusions and suggestions for further research

This paper has set forth a quantitative analysis of epistemic expressions in discussion forums, and contrasted the results with those of comparable corpora of newspaper opinion articles and political speeches. The main findings are summarised as follows:

1. The number of epistemic expressions in the corpora of the three genres has displayed significant quantitative differences, which, together with the highest ratio per thousand words displayed by the discussion forums, has confirmed Hypothesis 1: epistemic expressions are more frequent in discussion forums than in newspaper opinion articles and political speeches. It must be noted, though, that the difference between forums and political speeches is much larger than that between forums and opinion articles.

2. The quantitative analysis has also uncovered significant distributional differences between categories of epistemicity across the three genres. In particular, cognitive attitude (CGA) expressions are overwhelmingly more common in the forums than in the other two genres. Therefore, Hypothesis 2 has also been confirmed.

3. Discussion forums have also been proved to display epistemic expressions of all the categories; this distribution seems due to the coexistence of two needs felt by participants, one of which is shared with each of the other genres under analysis. Writers in discussion forums share with authors of opinion articles the need to present their worldviews openly, acknowledging other possible positions, and they share with writers of political speeches the need to sound reflective and personal.

4. The frequency of epistemic modal adverbs has displayed significant differences between the three genres, the highest number corresponding to the forums. Concretely, the adverb of medium commitment *probably* is overwhelmingly more common in the forums than in the other genres.

5. Epistemic expressions in discussion forums have been proved to display features of orality, concretely routinisation and abundance of linguistic devices associated with spoken discourse, to a higher extent than the other two genres.

   The similarities and differences found between the epistemic expressions in the three genres under consideration lead to predict the fruitfulness of prospective comparative analysis by adding comparable English corpora of other types of argumentative discourse, such as letters from readers in newspapers, essays of diverse kinds (scientific, philosophical, theological…), legal texts (judgements, appeals…) or commercial advertising speech. The research could also be extended to corpora collected in other Anglophone countries or to other languages.

Notes

1 The full reference of the project is specified in the Acknowledgements.
2 Throughout the paper, the terms *true* and *truth* are used considering human limitations of access to reality, through our bodies and minds.
3 The coding of the texts consists in the acronym ENGF, which means "English Forums", and a number assigned for each text. The annotation system (with angle brackets) contains the label EP for epistemicity, followed by another label corresponding to the subtype of epistemicity (see Section 3). Throughout the paper, the examples quote extracts from the forums in the original form, with no correction of errors of grammar, spelling or punctuation.
4 Domínguez-Romero and Martín de la Rosa's paper includes comparative analysis across languages (English and Spanish) and ideologies (conservative and progressive). The present paper includes only one ideological consideration, included in Section 5.6.
5 See, for instance, the 'incel' forums analysed in Prażmo (2020).
6 In a number of references (Lampert, 2015; Musi and Rocci, 2017; Carretero 2020), the epistemic meaning of *clearly* is considered as epistential, on the grounds that it has an evidential component of conclusive evidence and an epistemic modal element of strong commitment to the truth of the proposition. Following the lines of Domínguez-Romero and Martín de la Rosa (2023), in the present paper epistentiality is not considered as a category and epistemic *clearly* is included in evidentiality.
7 There is another kind of evidentiality, direct perceptual evidentiality (DPE), which indicates direct access to visual or some other sensory form of evidence. In English, direct perception is most often expressed by categorical statements without explicit evidential markers. An example with an explicit expression of DPE would be *I see you're crying* when the speaker is witnessing the event. In the discussion forums, no instances of DPE were found. There are a few cases of the verb *see* followed by a non-finite clause, such as (1) below:
(1) Do shop around, as **I've seen** a lot of people on here say they've had custom rings which have been surprisingly well-priced. (ENGF-18)
However, following Boye (2012, 285-286) the present approach does not consider these cases evidential on the grounds that the verb SEE scopes over a state of affairs (which can be said to occur, not to have a truth value), while evidentiality always scopes over a proposition (which has truth value).
8 For a description of the whole corpus see Sánchez-Moya and Maíz-Arévalo (2023), where it is analysed in terms of evaluative stance.
9 Two papers with a similar selection of markers are Marín-Arrese (2021a, 2021b).
10 The modal auxiliaries *will* and *would* can also express epistemic modality, but were not included in the model, given the complexity of their semantics (see, for

example, Coates 1983; Carretero 1995) and their high number of occurrences in all the discourse types. *Should* and *ought to* have also been excluded, for the reason that they do not frequently express epistemic modality (Coates 1983).

11   The quantitative data about newspaper opinion articles and political speeches have been extracted from Domínguez-Romero and Martín de la Rosa (2023) and, for a number of specific expressions, from the English corpora used in said paper.

12   In terms of Stefanowitsch (2006, 62), this absence of *allegedly* and *reportedly* is accidental rather than significant, since the occurrence of these adverbs in discussion forums is not ungrammatical, nor is it pragmatically inadequate *per se*. In fact, a small number of occurrences (for example, one case of each adverb) instead of total absence might still have been considered as a feature bringing the forums closer to spoken discourse in comparison to the opinion articles.

13   A remarkable difference was found between the speeches of the two parties under analysis: *I know* is more common in the speeches of the Conservative Party, and *we know* in those of the Labour Party.

14   The calculation was carried out by the author, using the *BNC World Edition*, rounding off the total number of words of the written and spoken components to 90 million and 10 million words respectively.

References

Biber, Douglas, Stig Johansson, Geoffrey Leech, Susan Conrad, and Edward Finegan. 2002. *Longman Grammar of Spoken and Written English*. London & New York: Longman.

Boye, Kasper. 2012. *Epistemic Meaning: A Crosslinguistic and Functional-cognitive Study.* Berlin: De Gruyter.

Brown, Penelope, and Stephen C. Levinson. 1987. *Politeness: Some Universals in Language Usage*. Cambridge: Cambridge University Press.

Carretero, Marta. 1995. *La pragmática de las expresiones de modalidad epistémica en el inglés hablado*. PhD diss, Universidad Complutense de Madrid. https://eprints.ucm.es/id/eprint/3368/1/AH3009201.pdf

Carretero, Marta. 2014. "The Role of Authorial Voice in Professional and Non-professional Reviews of Films: An English-Spanish Contrastive Study of Engagement." *Dialogicity in Written Specialised Genres.* Ed. Luz Gil-Salom and Carmen Soler-Monreal. Amsterdam & Philadelphia: John Benjamins. 55–85.

Carretero, Marta. 2020. "Epistentiality, Manner and Dialogic Contraction: The Case of English *clearly* and Spanish *claramente*." *Journal of Pragmatics* 169: 49–60.

Carretero, Marta, Juana I. Marín-Arrese, and Julia Lavid-López. 2017. "Adverbs as Evidentials: An English-Spanish Contrastive Analysis of Twelve Adverbs in Spoken and Newspaper Discourse." *Kalbotyra* 70: 32–59.

Chojnicka, Johanna. 2012. "Reportive Evidentiality and Reported Speech: Is there a Boundary? Evidence of the Latvian Oblique." *Multiple Perspectives in Linguistic Research on Baltic Languages*. Ed. Aurelija Usonienė, Nicole Nau, and Ineta Dabašinskienė. Newcastle upon Tyne: Cambridge Scholars. 170–192.

Coates, Jennifer. 1983. *The Semantics of the Modal Auxiliaries*. London: Croom Helm.

Domínguez-Romero, Elena, and Victoria Martín de la Rosa. 2023. "Epistemic Stance and the Expression of Ideology in Newspaper Opinion Articles and Political Speeches: An English-Spanish Contrastive Study." *Stance, Inter/Subjectivity and Identity in Discourse*. Ed. Juana I. Marín-Arrese, Laura Hidalgo-Downing, and Juan Rafael Zamorano-Mansilla. Frankfurt: Peter Lang. 75–99.

DuBois, John W. 2007. "The Stance Triangle." *Stancetaking in Discourse*. Ed. Robert Englebretson. Amsterdam & Philadelphia: John Benjamins. 139–182.

Eggins, Suzanne. *2004. An Introduction to Systemic Functional Linguistics*. 2nd edition. New York & London: Continuum.

Figueras-Bates, Carolina. 2015. "'I Am a Waste of Breath, of Space, of Time': Metaphors of Self in a Pro-anorexia Group." *Qualitative Health Research* 25.2: 189–204.

Izquierdo-Alegría, Dámaso. 2016. *Alcances y límites de la evidencialidad. Aspectos teóricos y propuesta de análisis aplicada a un conjunto de adverbios evidencialoides en español*. Pamplona: Universidad de Navarra.

Kärkkäinen, Elise. 2003. *Epistemic Stance in English Conversation. A Description of Its Interactional Functions, with a Focus on* I think. Amsterdam & Philadelphia: John Benjamins.

Lampert, Günther. 2015. "Sense Activation Triggering in English Epistentials: Attention Distribution, Contextual Modulation of Meaning, and Categorization Issues." *Cognitive Semantics* 1.1: 77–103.

Langacker, Ronald W. 2013. "Modals: Striving for Control." *English Modality: Core, Periphery and Evidentiality*. Ed. Juana I. Marín-Arrese, Marta Carretero, Jorge Arús Hita, and Johan van der Auwera. Berlin: Mouton de Gruyter. 3–55.

Lee, Mihan. 2017. "Don't Give up! A Cyber-ethnography and Discourse Analysis of an Online Infertility Patient Forum." *Culture, Medicine, and Psychiatry* 41.3: 341–367.

Marcoccia, Michel. 2003. "On-line Polylogue: Conversation Structure and Participation Framework in Internet Newsgroups." *Journal of Pragmatics* 36: 115–145.

Marín Arrese, Juana I. 2015. "Epistemicity and Stance: A Cross-linguistic Study of Epistemic Stance Strategies in Journalistic Discourse in English and Spanish. A Cross-linguistic Perspective." *Discourse Studies* 17.2: 210–225.

Marín-Arrese, Juana I. 2017. "Stancetaking and Inter/Subjectivity in Journalistic Discourse: The Engagement System Revisited." *Evaluation in Media Discourse: European Perspectives*. Ed. Ruth Breeze, and Inés Olza. Bern: Peter Lang. 21–48.

Marín-Arrese, Juana I. 2021a. "Stance, Emotion and Persuasion: Terrorism and the Press." *Journal of Pragmatics* 177: 135–148.

Marín-Arrese, Juana I. 2021b. "Winds of War. Epistemic and Effective Control in Political Discourse." *Cultura, Lenguaje y Representación / Culture, Language and Representation* xxvi: 283–307.

Marín-Arrese, Juana I., and Marta Carretero. 2022. "Evidentiality in Spanish." *Evidential Marking in European Languages: Toward a Unitary Comparative Account.* Ed. Björn Wiemer, and Juana I. Marín-Arrese. Berlin & Boston: De Gruyter Mouton. 235–285.

Marín-Arrese, Juana I., Marta Carretero, and Aurelija Usonienė. 2022. "Evidentiality in English." *Evidential Marking in European Languages: Toward a Unitary Comparative Account.* Ed. Björn Wiemer, and Juana I. Marín-Arrese. Berlin & Boston: De Gruyter Mouton. 57–94.

Marín-Arrese, Juana I., Laura Hidalgo Downing, Marta Carretero, Elena Domínguez Romero, Sergio Ferrer Navas, Laura Filardo Llamas, Carmen Maíz Arévalo, Victoria Martín de la Rosa, Natalia Mora López, Begoña Núñez Perucha, Paula Pérez Sobrino, Alfonso Sánchez Moya, and Julia Williams Camus. 2020. "Stancetaking in Discourses: Epistemicity, Effectivity, Evaluation." *Thresholds and Ways Forward in English Studies*. Ed. Lourdes López Ropero, Sara Prieto García-Cañedo, and José Antonio Sánchez. Alicante: Servicio de Publicaciones de la Universidad de Alicante. 269–274. https://web.ua.es/es/aedean2019/documentos/-gestadm/e-book-alicante-2019.pdf

Martin, James R., 1984. "Language, Register and Genre." *Children Writing.* Ed. Frances Christie. Geelong, Vic.: Deakin University Press. 21–29.

Martin, James R., and Peter R. R. White. 2005. *The Language of Evaluation*. New York: Palgrave.

Musi, Elena, and Andrea Rocci. 2017. "Evidently Epistential Adverbs Are Argumentative Indicators: A Corpus-based Study." *Argument and Computation* 8: 175–192.

Nacey, Susan. 2020. "Figurative Production in a Computer-mediated Discussion Forum." *Producing Figurative Expression: Theoretical, Experimental and Practical Perspectives*. Ed. John Barnden, and Andrew Gargett. Amsterdam: John Benjamins. 363–388.

Nuyts, Jan. 2001. *Epistemic Modality, Language and Conceptualization: A Cognitive-pragmatic Perspective.* Amsterdam & Philadelphia: John Benjamins.

Prażmo, Ewelina. 2020. "Foids Are Worse than Animals. A Cognitive Linguistics Analysis of Dehumanizing Metaphors in Online Discourse." *Topics in Linguistics* 21.2: 16–27.

Rozumko, Agata. 2019. *Modal Adverbs in English and Polish: A Functional Perspective*. Białystok: Białystok University Press.

Sánchez-Moya, Alfonso. 2019. *Exploring Digital Discourses on Intimate Partner Violence: A Socio-cognitive Approach.* PhD diss, Universidad Complutense de Madrid & Vrije Universiteit Amsterdam. https://eprints.ucm.es/id/eprint/56465/

Sánchez-Moya, Alfonso, and Carmen Maíz-Arévalo. 2023. "'Histrionic, Appalling, a Major Turkey': The Expression of Evaluative Stance in the Discourse of Online Forums." *Stance, Inter/Subjectivity and Identity in Discourse.* Ed. Juana I. Marín-Arrese, Laura Hidalgo-Downing, and Juan Rafael Zamorano-Mansilla. Frankfurt: Peter Lang. 249–269.

Spencer-Oatey, Helen. 2000. "Rapport Management. A Framework for Analysis." *Managing Rapport through Talk across Cultures.* Ed. Helen Spencer-Oatey. New York & London: Continuum. 11–46.

Stefanowitsch, Anatol. 2006. "Negative Evidence and the Raw Frequency Fallacy." *Corpus Linguistics and Linguistic Theory* 2.1: 61–77.

Thomas, Jenny. 1995. *Meaning in Interaction: An Introduction to Pragmatics.* London & New York: Longman.

Weigand, Edda. 2010. *Dialogue – The Mixed Game.* Amsterdam & Philadelphia: John Benjamins.

Appendix:

Metadata of the discussion forums and threads under analysis. The word count includes citations of previous contributions.

GENRE	SOURCE	URL	TITLE	DATE	WORDS	CODE
FORUM-SOCIETY	FORUM-TALK-UK.COM	1	Threatening Gay Marriage	05-09-2012	5118	ENGF-01
FORUM-SOCIETY	FORUM-TALK-UK.COM	2	Britain's Drink problem.	05-09-2006	7626	ENGF-02
FORUM-CAREER	CARERS UK FORUM	3	Mental Exhaustion	06-06-2019	6447	ENGF-03
FORUM-CAREER	CARERS UK FORUM	4	Tips for Newbie carers	28-12-2015	5284	ENGF-04
FORUM-SOCIAL ISSUES	SANE FORUM UK	5	What If I Just want To Stay In Bed All Day	02-11-2018	1808	ENGF-05
FORUM-SOCIAL ISSUES	SANE FORUM UK	6	The pros and cons of (alcohol) self medicating	06-10-2018	9001	ENGF-06
FORUM-SOCIAL ISSUES	GINGERBREAD FORUM	7	2 years on from divorce	13-03-2019	2629	ENGF-07
FORUM-SOCIAL ISSUES	GINGERBREAD FORUM	8	Single parent dad looking for groups in Birmingham	27-06-2019	792	ENGF-08
FORUM-BUSINESS	UK BUSINESS FORUMS	9	Is buying from China risky?	16-01-2013	8143	ENGF-09
FORUM-BUSINESS	UK BUSINESS FORUMS	10	What will difference will President Obama Make?	04-11-2008	11906	ENGF-10
FORUM-CULTURE	THE LITERATURE NETWORK FORUMS	11	Which is your favorite Dickens novel?	27-05-2019	5898	ENGF-11
FORUM-CULTURE	THE LITERATURE NETWORK FORUMS	12	The trend of adapting classic novels into musicals	13-09-2011	5537	ENGF-12
FORUM-ENVIRONMENT	CLIMATE DEBATE FORUM	13	What about the sinking islands?	09-10-2015	8139	ENGF-13
FORUM-ENVIRONMENT	CLIMATE DEBATE FORUM	14	Climate change and diseases	09-01-2018	653	ENGF-14
FORUM-EDUCATION	PHD DISCUSSION FORUM	15	To PhD or not to PhD	16-07-2008	765	ENGF-15
FORUM-EDUCATION	PHD DISCUSSION FORUM	16	PhD loans – what do you all think?	11-05-2018	1293	ENGF-16
FORUM-IMMIGRATION	FORUM FOOTBALL.CO.UK	17	Is Crime in UK getting out of control?	21-07-2017	2589	ENGF-17

FORUM-WEDDING	HITCHED.CO.UK/ CHAT/FORUMS	18	Wedding ring dilemma	26-05-2019	443	ENGF-18
FORUM-WEDDING	HITCHED.CO.UK/ CHAT/FORUMS	19	Family fall out	19-06-2019	898	ENGF-19
FORUM-HOUSING	House Price Crash Forum	20	Tenancy Deposit Rules Fixed	19-05-2012	1189	ENGF-20
FORUM-HOUSING	House Price Crash Forum	21	Is renting in the UK really that bad?	28-12-2017	1979	ENGF-21
FORUM-TECHNOLOGY	TechRepublic Forums Smartphones	22	Do more expensive smartphones last longer than cheaper ones?	10-06-2019	776	ENGF-22
FORUM-TECHNOLOGY	Tom's Hardware Forum	23	Discussion Mac vs. Windows	19-02-2019	1772	ENGF-23
FORUM-CULTURE	BRITMOVIE FORUM	24	Original Memories of Films on TV	23-04-2019	3041	ENGF-24
FORUM-IMMIGRATION	BRITISHEXPATS. COM	25	Immigration Fraud - Just Don't Do It	05-08-2009	2530	ENGF-25

1. http://www.talk-uk.com/showthread.php?24182-Threatening-Gay-Marriage
2. http://www.talk-uk.com/showthread.php?120-Britain-s-Drink-problem
3. https://www.carersuk.org/forum/support-and-advice/young-adult-carers/mental-exhaustion-37277
4. https://www.carersuk.org/forum/support-and-advice/tips-and-practical-advice/ tips-for-newbie-carers-24565
5. http://www.sane.org.uk/support_forum/viewtopic.php?f=4&t=33905
6. http://www.sane.org.uk/support_forum/viewtopic.php?f=4&t=33781
7. https://www.gingerbread.org.uk/community/online-forum/topic/2-years-on-from-divorce/
8. https://www.gingerbread.org.uk/community/online-forum/topic/single-parent-dad-looking-for-groups-in-birmingham/
9. https://www.ukbusinessforums.co.uk/threads/is-buying-from-china-risky.284306/
10. https://www.ukbusinessforums.co.uk/threads/what-will-difference-will-president-obama-make.85533/
11. http://www.online-literature.com/forums/showthread.php?89958-Which-is-your-favorite-Dickens-novel
12. http://www.online-literature.com/forums/showthread. php?64327-The-trend-of-adapting-classic-novels-into-musicals
13. https://www.climate-debate.com/forum/what-about-the-sinking-islands-d11-e729.php
14. https://www.climate-debate.com/forum/climate-change-and-diseases-d11-e1677.php
15. https://www.findaphd.com/advice/phd-discussion-thread.aspx?threadpage=1&thread=9963
16. https://www.findaphd.com/advice/phd-discussion-thread.aspx?threadpage=2&thread=54330
17. http://forum.football.co.uk/showthread.php?458659-Is-Crime-in-UK-getting-out-of-control
18. https://www.hitched.co.uk/chat/forums/thread/wedding-ring-dilemma-548347/
19. https://www.hitched.co.uk/chat/forums/thread/family-fall-out-548451/
20. https://www.housepricecrash.co.uk/forum/index.php?/topic/178771-tenancy-deposit-rules-fixed/
21. https://www.housepricecrash.co.uk/forum/index.php?/topic/231902-is-renting-in-the-uk-really-that-bad/
22. https://www.techrepublic.com/forums/discussions/ do-more-expensive-smartphones-last-longer-than-cheaper-ones/

23. https://forums.tomshardware.com/threads/mac-vs-windows.3451440/

24. https://www.britmovie.co.uk/forum/cinema/general-film-chat/70385-original-memories-of-films-on-tv

25. https://britishexpats.com/forum/us-immigration-citizenship-visas-34/immigration-fraud-just-dont-do-624065/