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## Stance nouns in COVID-19 related blog posts

A contrastive analysis of blog posts published in *The Conversation* in Spain and the UK

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Research dissemination through academic blogs creates opportunities for writers to reach wider audiences. With COVID-19, public dissemination of research impacts daily practices, and national and international policies, and in countries like the UK and Spain, *The Conversation* publishes accessible COVID-19 themed research. Such academic blogs are important to global academy, yet the role of authorial stance therein is notably under-investigated. This paper presents a corpus-based contrastive analysis of 'stance nouns + that/de que' in a comparable corpus of English and Spanish COVID-19 themed academic blogs, from *The Conversation*. The analysis identifies similarities and differences across languages that reflect how COVID-19 is framed in each language. For example, Spanish academics use *Possibility* and *Factualness* nouns when self-sourcing their stances with expanding strategies, while English academics use *Argument* and *Idea* nouns with external-sources in contracting strategies. Overall, this paper adds to current linguistic knowledge on academic blogs and scientific communication surrounding COVID-19.

**Key words:** academic discourse; academic blogs; authorial stance; online registers; stance nouns

## 1 Introduction

Academic writing is a multilingual and multicultural discourse. Typically, research on academic writing centres on the English language, owing to its role as the lingua franca of academia (Hyland 2015). However, academic languages like Spanish remain important in a range of disciplinary contexts and for disseminating academic research to educators, government, practitioners, and the wider public through parascientific genres, such as academic

blogs (Zou & Hyland 2020). Such wider and impactful dissemination has become as important as publishing research in academic journals, as writing for the public on blog sites helps to ensure that research is visible and accessible (Zou & Hyland 2019). One such site, *The Conversation*, publishes blog posts for a range of global contexts in English, French, Indonesian, and Spanish languages, for example. In this paper, we compare texts on COVID-19 from the English and Spanish editions of the site, owing to the shared role of these languages as global lingua franca and the geographical proximity of the UK and Spain, which saw the COVID-19 pandemic unfold at a similar and comparable rate.

In the context of COVID-19, public communication is important for impacting wider (inter)national policy and public engagement (Liao et al. 2020). This is because the COVID-19 pandemic is more than a virological episode, of interest to academia. Rather it is shaping and is shaped by the cultures and people the virus is impacting (Lafuente & Giménez Toledo 2020). Therefore, not only do academic blogs on COVID-19 occupy a uniquely powerful position, internationally, parascientific communication in the multilingual academy can offer a valuable medium to access how academic knowledge cultures engage with and disseminate information on COVID-19 to their wider public.

Across cultures, academic writing has been seen to vary in myriad ways. Curry (2021) demonstrates that different languages' and writing cultures' use of metadiscourse plays a key role in varying how knowledge is communicated differently in different languages. Among the key metadiscoursal markers that define the register of academic blogs in English are stance markers. When compared to traditional academic texts such as research articles, stance-taking in blogs can appear more frequent (Zou & Hyland 2019). In Spanish, academic blogs have received little attention; however, in research articles, writer stance is a central focus in academic discourse studies in Spanish, and stance-taking has been found to be an important feature of Spanish academic writing (Mur-Dueñas 2011). Overall, stance can embody different meanings, be used to achieve different ends and engage with sources differently in academic writing across languages. Overall, in both English and Spanish, stance-taking in academic blogs has received limited attention. Therefore, unpacking the authorial stance in COVID-19 communications in the novel genre of academic blogs offers opportunities to investigate the degree of correspondence in stance-taking practices in a less-studied and public-facing genre, and consider what these stance practices tell us about how the specific cultures and contexts studied in this paper frame the COVID-19 pandemic.

In presenting this study, we focus initially on a review of research on blog writing, stance-taking and 'stance nouns + that/de que' from both monolingual and multilingual

perspectives. Subsequently, the CONVIDES corpus– 400 COVID-19 blog posts from *The Conversation* Spain and UK (2020)– and the method we used for extracting and analysing 'stance nouns + that/de que' are presented. This is followed by the presentation and discussion of the results. The paper then offers a brief conclusion, contextualising our findings within the wider field and the COVID-19 pandemic.

## **2 Academic blog writing and authorial stance across cultures**

As an emerging genre, academic blogs have received rather little attention in the academic discourse literature. Early studies in academic blog writing sought to unpack this genre and arrived at conflicting conclusions. While writers saw value in blogs for disseminating academic knowledge to more varied audiences (Mauranen 2013), the main advantages of blogs, i.e. rapid dissemination, cost effectiveness, ease of use and access, and value for self-promoting, were offset by a number of perceived shortcomings. These included a lack of recognition, formality, and purpose, as well as issues surrounding blogs' long-term availability and time-consuming nature (Puschmann 2014). Recently, the perspective on blogs is more positive, as they are recognised for helping writers to reach larger readerships than they do with research articles (Luzón 2018). While research on Spanish academic blogs is limited, for non-academic blogs, similar observations have been made surrounding their value for wider engagement (Baceta 2014) and for producing engaging texts (Pano Alamán 2019).

Key research from Zou and Hyland (2019; 2020) identifies academic blogs as a hybrid genre that draws on conventions from academic and journalistic texts. Their work argues that academic blogs do not conflict with existing academic genres, but merge social and discursive practices from journal papers, talks, and social media, as well as journalistic texts. This notion of hybridity is also evidenced in Biber and Egbert (2016; 2018), who find blended linguistic characteristics in a myriad of online registers that reflect the discursive practices of their parent registers. Hybrid registers appear to embody more “extreme linguistic characterizations” than their parent registers (Biber & Egbert 2016: 129). This is supported in the context of academic blogs, where the marked use of literate stance in research articles in English (Biber & Egbert 2016) is amplified in its more frequent use in academic blog writing (Zou & Hyland 2019). Likewise, in Spanish, there is a marked use of stance in research articles (Mur-Dueñas 2011) and journalistic texts (Tapia & Biber 2014). Owing to the hybridity of academic blogs, there is an opportunity for English and Spanish academic writers to engage in increased dialogic

interaction and employ authorial stance in ways that differ from research articles and journalistic texts.

Recognising the relevance of authorial stance to the texts in CONVIDES, this paper centres on the study of 'stance nouns + that/de que' (SNTQ). In their studies of internet registers, Biber, Egbert, and Zhang (2018), Biber and Egbert (2016; 2018), and Biber and Zhang (2018) identify that stance devices are more common in opinion blogs than other internet registers, such as product reviews. According to Biber, Egbert and Zhang (2018), the 'stance noun + that' structure shows the highest mean frequency in the opinion blogs category. While opinion blogs in Spanish language contexts have received no such attention, journalistic texts are of note. The use of the 'stance noun + de que' structure forms part of a larger study of stance in Tapia and Biber's (2014) work on Ecuadorian Spanish. Their work identifies that stance nouns are a clear resource for writer and reader interaction in journalistic texts. Recognising the evident importance of the SNTQ structure to blogs in English, it is worth investigating how this corresponds in Spanish and how frequent stance markers can be used to frame COVID-19 research in English and Spanish.

Semantic categorisations of stance nouns have served to illustrate the types of stance nouns that writers use and the broad meanings with which stance markers are concerned. Charles (2007), in her study of MPhil dissertations, categorises 'stance nouns + that' as *Idea*, *Argument*, *Evidence*, *Possibility*, and *Other*. Charles finds discipline to be a key variable in determining the use of different semantic categories. Similarly, Flowerdew and Forest (2015) offer a valuable perspective on the discursive nature of signalling nouns, which are grouped as *Idea*, *Locution*, and *Fact* nouns, for example. Such nouns are also studied in Jiang and Hyland (2018) and are referred to as metadiscursive nouns. In their study, these nouns are found to act as both interactive and interactional discourse, serving to organise the discourse and create relationships between ideas. Furthermore, in recent work on shell nouns, their usage in formal registers has been evidenced across spoken and written language (Fang & Dong 2021), and in academic undergraduate discourse, evaluative functions have also been identified (Benitez-Castro 2021). Furthermore, Schmid's (2000) work on shell nouns is foundational in this area and it offers a valuable pattern-based approach to the identification and classification of SNTQ structures. Charles (2007) similarly adopts a pattern-based approach, building on Francis, Hunston, and Manning's (1998) semantic categorisations. We too adopt this approach herein to draw connections between the semantic categories of SNTQ structures and the rhetorical functions they perform. In Spanish, Samaniego (2018) studies stance nouns and, although she does not group them semantically, her list of stance nouns in conference presentations and

proceedings corresponds to those in Charles (2007). Interestingly, she also finds examples of factual and future-meaning stance nouns. This presents a clear potential for cross-linguistic variation and examples of culturally bound stance practices.

Beyond noun semantics, Charles (2007) argues that disciplinary writers use either external evidence and/or themselves as a source of information to support their stance-taking. Typically, it has been found that external sources are used for stance-taking in research article writing across disciplines (Jiang 2017). In the context of academic blogs, this notion of source use is particularly pertinent, given that a key feature of blogs is the ability to directly link to external evidence (Yus 2011). The use of sources again reflects a potential space for variation in cultural practices, as Spanish academic writing often uses fewer sources, owing to cultural differences (Luzón 2015). This has implications for how evidence is used to frame COVID-19 in different languages.

Functionally, stance can be used to perform a number of different strategies. Studies in metadiscourse consider stance in terms of attitude markers, self-mentions, hedges, and boosters, and in contrastive studies, English has been found to demonstrate more stance makers, with a notable use of hedges. Spanish has been found to use more boosters than English, despite the overall lower frequency of stance markers (Mur-Dueñas 2011). Chang and Shlepppegrell (2011) identify stance strategies by drawing appraisal theory (Martin & White 2005) into an evaluative investigation of writers' use of contracting and expanding rhetorical strategies. These strategies are evident in heteroglossic discourse that engages with multiple voices and perspectives and affords an intersubjectivity to texts. Notably, in expert academic writing, Liardét and Black (2019) find that contracting strategies are more frequent than expanding strategies. Crucially, this form of engagement is central to how science is communicated across academic genres. Therefore, investigating how the SNTQ structure facilitates expanding and contracting strategies in English and Spanish academic blog writing would offer a number of valuable perspectives on this burgeoning academic genre and help us to understand whether writers discussing COVID-19 embrace engagement strategies differently when taking stances in English and Spanish academic blogs.

Generally, our growing understanding of the language of COVID-19 extends to research on medical discourse (Ezzarrouki 2020), metaphor (Sabucedo, Alzate, & Hur 2020), political discourse (Harb & Serhan 2020), and social media discourse (Zhu 2020). Our study moves beyond the discourse of the texts and the language of COVID-19 and investigates academic writers' communicative practices when framing COVID-19 discourse through the SNTQ structure. This is important because authorial stance, a key feature of academic

discourse, impacts the ways in which readers interpret scientific and academic knowledge (Hyland & Jiang 2018). Given that academic blogs address a wider, more public and, arguably, less meta-linguistically aware readership and can impact (inter)national policy and public engagement (Liao et al. 2020), it is crucial that we develop a clear understanding of the degree of authorial stance espoused in COVID-19 communications. Such an understanding will help us to unpack how UK and Spanish academics present emerging knowledge on COVID-19 to the wider public.

Responding to this complex context of academic discourse, blog writing, and COVID-19 communications in English and Spanish, this paper responds to the following research questions:

- How does the use of SNTQ structures correspond in English and Spanish academic blogs on COVID-19?
- What similarities and differences occur across languages and disciplinary groups in terms of the semantic categories, the use of self- and external sources, and the facilitation of expanding and contracting strategies in 'stance nouns + that and de que'?
- What does the use of SNTQ structures in English and Spanish academic blogs on COVID-19 tell us about how UK and Spanish cultures discuss the COVID-19 pandemic?

### **3 Data and Methodology**

To respond to the identified research questions, this section presents the data and methodology used in this study. In Section 3.1, the comparable corpus CONVIDES is described with a view to demonstrate its contents and comparability. In Section 3.2, the corpus-based contrastive analysis is outlined, signalling how the SNTQ structures in English and Spanish are extracted from CONVIDES and analysed in terms of their semantic categories, their use of self- and external sources, and their facilitation of expanding and contracting strategies.

#### **3.1 CONVIDES: A Corpus of COVID-19 in *The Conversation* UK and Spain**

CONVIDES contains two comparable subcorpora of COVID-19 themed blog posts, from *The Conversation* UK and Spain. The posts were published between February 12<sup>th</sup> and July 31<sup>st</sup>, 2020 and were collected using *Factiva* and a python script written by the researchers and made

available from a GitHub repository<sup>1</sup>. Each subcorpus comprises 100 texts from February to May and 100 texts from June and July. The first period starts the day after the World Health Organization (WHO) named the novel coronavirus ‘COVID-19’. The following day, the first case in London was confirmed. The second period starts June 1st, when in Spain, 70% of the population saw their lockdown measures relaxed. On June 5th, the WHO published updated guidance on the use of masks for the control of COVID-19. This period finished on July 31<sup>st</sup>, when Prime Minister Boris Johnson postponed lockdown-easing measures, scheduled to begin in England on the 1<sup>st</sup> of August for two weeks. In Spain, by July 31<sup>st</sup>, 288,522 had tested positive and 28,445 had died; in England, 264,047 had tested positive and 36,582 had died. Overall, this time period includes a number of key national and policy developments in both the UK and Spain, and the topics of the texts included in CONVIDES reflect this.

CONVIDES' English and Spanish subcorpora were compiled iteratively to ensure comparability. The 100 texts from each of the two time periods in each language were selected based on their relevance to the theme of COVID-19. Any texts that appeared to skew the metadata, presented in Table 1 and Figure 1, were removed e.g. some texts in *The Conversation* gather opinions of key actors in various fields (cf. Kimbrough, Cauce & Stanley 2020). These articles are typically longer than blog posts, serve a different purpose, and reflect a different generic make-up. Therefore, such posts were not included. This is an important aspect in the development of a comparable corpus, as comparability must be established at each stratum of the corpus; for corpus-based contrastive studies, analyses are based on the assumption of comparability of items being studied (Curry, 2021; Granger 2010). Therefore, variability within the subcorpora is acceptable, provided that this variability corresponds across language. In effect, this attention to comparability at each stratum is known as the establishment of a *tertium comparationis*, or comparable common ground (Granger 2010). Table 1 and Figure 1 present the composition of CONVIDES, in detail.

Table 1: Details of CONVIDES composition

| CONVIDES Subcorpus                    | English | Spanish |
|---------------------------------------|---------|---------|
| <b>Total tokens</b>                   | 235,489 | 251,650 |
| <b>Mean length of texts in tokens</b> | 1,027   | 1,107   |

<sup>1</sup> To access the script, visit <https://github.com/perezparedes2/downloadInternetContent>



|  |         |         |
|--|---------|---------|
| <b>Tokens in multi-authored texts</b>  | 84,753  | 96,893  |
| <b>Tokens in single-authored texts</b> | 150,736 | 154,757 |
| <b>No. of dates represented</b>        | 95      | 107     |
| <b>No. of institutions represented</b> | 96      | 76      |
| <b>No. of countries represented</b>    | 14      | 13      |

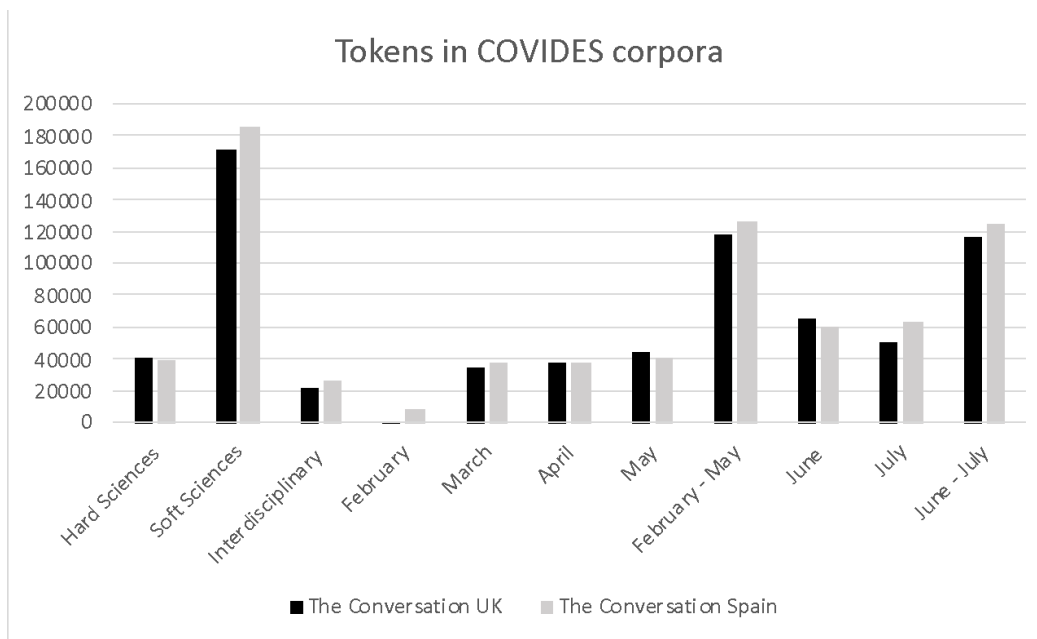


Figure 1. Tokens distribution across months and disciplines

As evidenced in Table 1 and Figure 1, the subcorpora are of a similar size and contain texts of a similar length, with similar token counts for hard and soft science and interdisciplinary texts. It should be noted that the disciplinary categorisation of texts is based upon the reported disciplinary specialism of the writers. In the Spanish subcorpus, 18% of the texts are grounded in economics, 17% in medicine, 10% in biology, 8% in psychology, 4% in pharmaceutical sciences and other 4% in law. The rest of the texts are written by (in decreasing order of frequency) experts in education, sociology, political science and computer science. In the English subcorpus, 19.5% of the posts are grounded in economics and 14% in medicine. In general terms, research disciplines are more atomised in the UK corpus, with psychology at 5.5%, history at 4.5%, sociology at 3.5%, and biology and environmental sciences at 3%. The attribution of discipline is, however, a non-trivial task. Many of the posts have been co-

authored by several researchers (i.e. 36 % in the English corpus) and, very often, their disciplines challenge over-simplified accounts of research niches.

The distribution of tokens across months is also similar, with the exception of fewer tokens from February in the English subcorpus. COVID-19 impacted Spain earlier than the UK and as such, more texts were published in February in Spain. Overall, as 100 texts were used in each language for each collection period, this difference is inconsequential.

Finally, the number of tokens in single- and multi-authored texts, and the number of dates, institutions, and countries represented are comparable in CONVIDES. Therefore, CONVIDES reflects a *tertium comparationis* at each stratum of the corpus. The corpus was part of speech (POS) tagged, annotated, and analysed using Sketch Engine (Kilgarriff et al. 2014).

### 3.2 Corpus-based contrastive analysis of SNTQ structures

As contrastive linguistic studies are based upon the comparison, in synchrony, of two comparable items, the concept of the *tertium comparationis* applies also to the linguistic items being studied. Herein, SNTQ structures have been established as worthy of investigation in Spanish and English, owing to their inherent formal comparability. Our study adopts a convergent contrastive analysis approach, electing and contrasting these two comparable forms:

- stance noun + that, e.g.:
  - despite **evidence that** they can reduce emissions.
- stance noun + de que, e.g.:
  - el **hecho de que** el virus pueda propagarse de forma desapercibida nos sugiere una razón adicional.

This delimited focus is typical of contrastive analyses and ensures that any conclusions drawn can be based on strong, robust evidence. However, we are limited to a discussion of correspondence between SNTQ structures and have not included examples with 'stance nouns + que', for example. This would add a further layer of variability to the analysis and would serve better as a follow-up study.

In our study of SNTQ structures, we:

- searched for all occurrences of *that* and *de que* in CONVIDES;
- extracted instances of *that* and *de que* with a noun to the left of the node;

- analysed each concordance line to remove occurrences of non-SNTQ structures.

As a result, we identified 144 occurrences of SNTQ structures in English and 118 in Spanish (701 and 574 per million words); a list of these nouns with examples and categorisations are available in Online Appendix 1. Mean scores and standard deviations of SNTQ structures were calculated using Lancaster Stats Tools Online (Brezina 2018). In the results and discussion in Section 4, the scores were normalized per 1,000 words (PTW).

Our analytical and conceptual framework merges approaches from Charles (2007), Chang and Schleppregrell (2011), and Biber, Egbert and Zhang (2018). Each study emphasises different analytical areas that we see as complementary when understanding the role of SNTQ structures in academic blogs. These areas include:

- the frequency and distribution of the semantic categorisation of SNTQ structures;
- the role of external- and self-sources for informing the stance employed by SNTQ structures within and across the data; and
- the contracting and expanding rhetorical strategies facilitated by SNTQ structures within and across the data.

Following Chang and Shleppregrell (2011) and Tapia and Biber (2014), we argue that the combination of these metadiscourse and appraisal approaches can potentially shed light on the relationship between stance noun semantic categories, source use to underpin stance, and the rhetorical strategy stance performs in academic blogs on COVID-19. Moreover, as this is a contrastive study, we are cognizant that applying linguistic frameworks designed for and from the study of English to a novel genre in languages other than English can be problematic (Salas 2015). Therefore, we maintained a cross-linguistic openness in the analysis of SNTQ structures herein, as the following sections demonstrate.

### *3.2.1 The semantic categorisation of SNTQ structures*

Our semantic categorisation of SNTQ structures builds upon Charles' (2007) and Francis, Hunston and Manning's (1998) semantic categorisations. Taking Charles' five semantic groups, *Argument*, *Evidence*, *Idea*, *Possibility*, and *Other* as a starting point, we investigated the semantic role of SNTQ structures in CONVIDES. Given the multilingual nature of our data and the underlying COVID-19 theme, we incorporated new semantic categories that emerged in the analysis. As a result, we expanded the *Other* category into five further groups: *Cause and Effect*, *Evaluation*, *Expression of Future Meaning*, *Factualness*, and *News*. These

categories reflect further semantic groupings in the wider literature (Benitez-Castro 2021; Forest & Flowerdew 2015; Samaniego 2018) and are outlined and exemplified in Table 2.

To maximise reliability, we took steps to ensure that the nouns were categorised consistently. A pilot was conducted to establish whether the observational categories were appropriate and effectively operationalized the purposes of the research (Cohen, Manion & Morrison 2018). We approached the coding of the stance nouns using Stemler's (2004) consensus estimates, a coding approach based on the raters' dynamic agreement on the nature of the construct analysed. As in Charles (2007), it should be noted that some nouns appear in more than one semantic group e.g. *suggestion* can be categorised as *Idea* and *Argument*, depending on its use in context.

Table 2: Definitions of Semantic Categories

| Semantic Category                   | Definition  | Example   |
|-------------------------------------|---|---|
| <b>Argument</b>                     | Like <i>Argument</i> (Charles 2007) and <i>Locution</i> (Forest & Flowerdew 2015), these nouns refer to elements of written and spoken texts that reflect semantic categories of argumentation and verbal activity (argument, claim, point, <i>hipótesis</i> ). | Other prominent theories include the <b>claim that</b> the virus was accidentally released by the Wuhan Institute of Virology, or that it was deliberately made as a biowarfare weapon, either by the Chinese or the Americans.<br><br>Partiendo de la <b>hipótesis de que</b> cada cultura determina ciertos estilos de comportamiento comunes a todos los individuos que viven en ella. |
| <b>Cause and Effect</b>             | This is a new category in our study. These nouns that evoke a sense of causation and a relationship between two or more propositions (reason, <i>causa de que</i> )   | One of the <b>reasons that</b> the rich have larger carbon footprints is because they fly further and more often than the average person.<br><br>En resumen, que un mal manejo de la infección es la <b>causa de que</b> los síntomas del COVID-19 sean peores.   |
| <b>Evaluation</b>                   | This is a new category in our study. Nouns that imply an evaluation of an event or a situation. Evaluation nouns constitute an authorial judgement (shame, concern, suspicion, <i>desventaja, complejidad</i> ).  | Following <b>concerns that</b> the self-employed were being left out, on March 26 the Chancellor of the Exchequer announced a new support scheme specifically for them, estimated to cost £9bn.<br><br>Con la enorme <b>desventaja de que</b> virus y bacterias pueden cubrir distancias enormes en días o semanas.   |
| <b>Evidence</b>                     | Like Charles (2007) <i>Evidence</i> nouns are nouns that refer to signs or evidence to support a stance. (sign, evidence, <i>evidencia, ejemplo</i> ).  | There is <b>evidence that</b> we can make behavioural changes following a crisis<br><br>Como no hay <b>evidencia de que</b> las mascotas puedan transmitir COVID-19 a las personas sino más bien lo contrario   |
| <b>Expression of Future Meaning</b> | This is a new category in our study and is also identified by Samaniego (2018). These nouns offer a future-forward perspective. Notably, this category was found to occur in the Spanish data only ( <i>momento</i> )   | Es el <b>momento de que</b> ciudadanos, gobiernos y empresas desarrollen una conciencia de datos y exploren las posibilidades de la tecnología  |
| <b>Factualness</b>                  | Like fact nouns in Forest & Flowerdew (2015), these nouns represent information about the world, indicating that something is factual or actual.  | But the <b>fact that</b> it was already struggling before the outbreak suggests that an interest rate cut and the government's fiscal expansion moves are not enough<br><br>Tampoco se define que <b>el hecho de que</b> algún alumno o alumna haya perdido a un ser querido deba requerir algún tipo de respuesta educativa desde la tutoría.  |

|                    |  |  |
|--------------------|--|--|
| <b>Idea</b>        | Like Charles (2007) and Forest & Flowerdew (2015), <i>Idea</i> nouns refer to ideas, beliefs, thought processes.   | The <b>idea that</b> it was already struggling before the outbreak suggests that an interest rate cut and the government's fiscal expansion moves are not enough.<br><br>Esa <b>idea de que</b> estamos en un paréntesis tras el cual todo volverá a la normalidad.                                    |
| <b>News</b>        | This is a new category in our study. Nouns that refer to novel or new information. Notably, this category was found to occur in the English data only (news).  | This means <b>news that</b> R may have increased above 1 again, particularly in specific regions, may not necessarily mean that current public health measures aren't working or that the disease is about to come roaring back  |
| <b>Possibility</b> | Like <i>Possibility</i> (Charles 2007) and <i>Modal Fact</i> (Forest & Flowerdew 2015), these nouns that refer to how likely or unlikely something is. (possibility, probability, <i>posibilidad, probabilidad</i> ) | The above case is fictitious – but there is a real <b>possibility that</b> that cases like this will occur in the coming weeks or months.<br><br>Ni acerca de la <b>posibilidad de que</b> los sistemas sanitarios se tambalearan, incluso sucumbieran, colapsados por un elevado número de pacientes. |

### 3.2.2 Authorial voice: source attribution and engagement strategies

Once the stance nouns had been classified semantically, we established (i) the scientific source of the nouns and propositions encapsulated in the subordinate clause and (ii) the strategies used by the writers to when demonstrating authorial stance with SNTQ structures. This was done through the examination of the co-textual information surrounding SNTQ structures. Following Charles (2007), sources were first classified as attributed either to the author(s) or some other researchers, persons or entities. These were coded either as *self*- (where authors did not use sources, but presented information based on their own authority) or *external*- (where the author used sources and evidence to support their stance).

Secondly, informed by Chang and Schleppregrell's (2011) study of contracting and expanding strategies, we coded the heteroglossic use of SNTQ structures. SNTQ structures arguably encapsulate heteroglossic discourse, given the recognition, or lack thereof, stance nouns afford other voices and perspectives in texts, as a form of interactional metadiscourse (Jiang & Hyland 2018). Therefore, following Martin and White (2005: 100), sentences such as "There is the argument though that the banks have been greedy" reflect heteroglossia, as the use of *argument* implies that there are several possible perspectives.

In determining the strategy that stance nouns perform, we operated with a degree of openness surrounding what constituted heteroglossic discourse. While heteroglossia is typically concerned with engaging other voices explicitly in the text, the focus on explicitness is a potentially Anglocentric constraint. That is because English is characterised by its explicitness (Hyland 2005) while Spanish is not (Mur-Dueñas 2011). Therefore, to remain inclusive regarding the expression of explicit and implicit heteroglossia, we adopted a broader

view, akin to Bakhtin (1981) and Florek (2018), where explicit engagement, alternative positions, intersubjectivity, and implied readership constitute heteroglossia herein. Following this perspective, we found all examples of SNTQ structures to perform heteroglossia, and we coded each one as facilitating contracting or expanding strategies. As we did with the semantic categorisation of the stance nouns, source attribution and engagement strategies were coded using Stemler's (2004) consensus estimates.

## **4 Results and discussion**

This section presents and discusses the results of this study. It focuses broadly on the SNTQ structure in CONVIDES in Section 4.1, stance nouns semantic categories, use of sources, and rhetorical functions in Section 4.2, and disciplinary variation in Section 4.3.

### **4.1 Stance nouns + that/de que in English and Spanish academic blogs**

SNTQ structures are moderately frequent in CONVIDES as they occur in almost half of the texts. The frequency mean is 0.64 (s.d.=1.04) and 0.49 (s.d.= 0.74) PTW in the English and Spanish language data, respectively, and the Juilland's D scores for SNTQ structure dispersion in CONVIDES demonstrate that they are relatively even in both English (0.88) and Spanish (0.89). These scores indicate that the use of SNTQ structures bears similarities with academic texts (Charles 2007; Jiang 2017), opinion blogs (Biber, Egbert & Zhang 2018), and journalistic texts (Tapia & Biber 2014). Tapia and Biber (2014) found that the mean scores for the SNTQ structure in Spanish ranged from 0.9 and 1.4 PTW in two different Ecuadorian papers. This suggests that this stance marker may be more frequent in newspapers than in blogs. Therefore, upon initial investigation, academic blogs in CONVIDES appear to reflect the hybrid genre discussed in Zou and Hyland (2019; 2020). However, the view that hybrid genres reflect more "extreme linguistic characterizations" than their parent registers (Biber & Egbert 2016: 129) is not necessarily supported in CONVIDES, in terms of the use of the SNTQ structure.

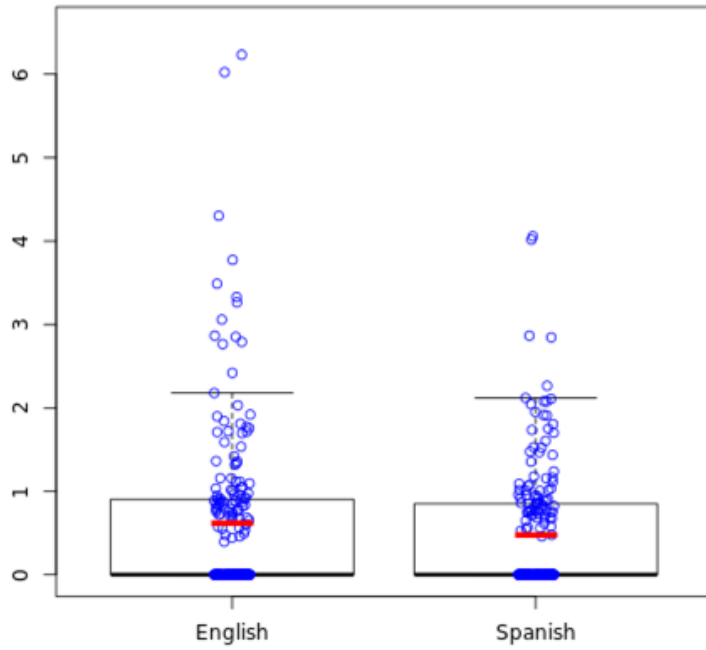


Figure 2: Distribution of SNTQ structures in CONVIDES

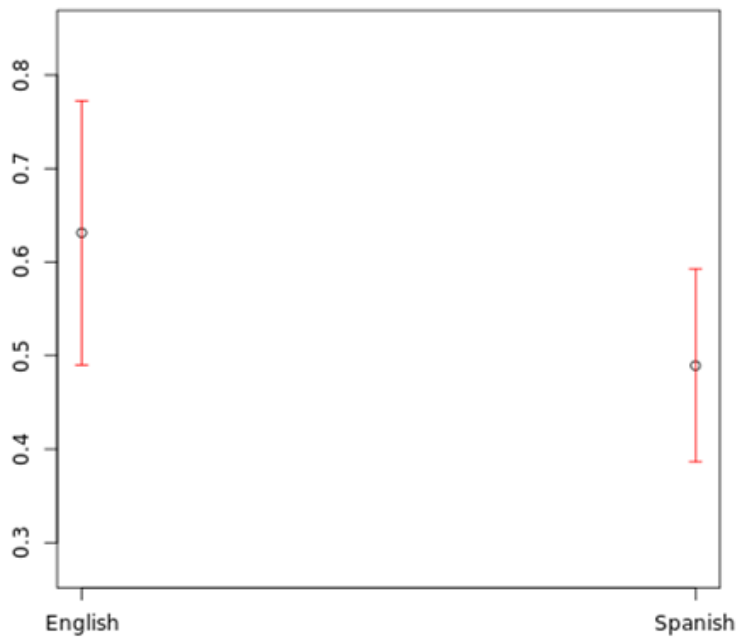


Figure 3: Confidence interval for SNTQ structures in CONVIDES

Notably, Figures 2 and 3 illustrate that outliers are infrequent in CONVIDES. The general correspondence in the data is also evidenced in Figure 3, which indicates that there is no significant difference in the frequency and dispersion of SNTQ structures in CONVIDES. Elsewhere, Spanish has been found to exploit significantly fewer metadiscourse markers to create writer and reader interaction (Curry 2021); however, this is not the case here. Overall, the relatively corresponding use of this stance marker in both CONVIDES subcorpora

demonstrates that, in the context of COVID-19, SNTQ-driven authorial stance is a feature of both English and Spanish contexts. This is not surprising given that stance markers are a recognised feature of both English and Spanish academic writing (Mur-Dueñas 2011). Therefore, to demonstrate how SNTQ structures reflect authorial and cultural perspectives on COVID-19 and cross-cultural variation in CONVIDES, the semantic categories, use of sources, and rhetorical strategies linked to these stance markers are discussed next.

#### 4.2 Stance noun semantic categories, use of sources, and rhetorical functions

While an overall sense of homogeneity emerges in the use of SNTQ structures in CONVIDES, upon closer inspection, there is evidence of variation across languages when semantic categorisation of SNTQ structures, use of sources, and their rhetorical functions are considered. The mean frequency, standard deviation, range, and Jullian's D score for each of these variables are presented in Table 3.

Table 3: Dispersion of SNTQ structures PTW in CONVIDES

| Category        | Mean |      | SD   |      | Range |    | Range% |       | CV    |      | Juilland's D |      |
|-----------------|------|------|------|------|-------|----|--------|-------|-------|------|--------------|------|
| Language        | EN   | SP   | EN   | SP   | EN    | SP | EN     | SP    | EN    | SP   | EN           | SP   |
| All             | 0.64 | 0.49 | 1.04 | 0.74 | 90    | 82 | 45%    | 41%   | 1.63  | 1.51 | 0.88         | 0.89 |
| Argument        | 0.11 | 0.02 | 0.37 | 0.14 | 18    | 6  | 9%     | 3%    | 3.55  | 5.77 | 0.75         | 0.59 |
| Cause/Effect    | 0.01 | 0.01 | 0.08 | 0.08 | 2     | 2  | 1%     | 1%    | 10.03 | 9.96 | 0.29         | 0.29 |
| Evaluation      | 0.09 | 0.05 | 0.29 | 0.2  | 19    | 13 | 9.5%   | 6.5%  | 3.31  | 3.82 | 0.77         | 0.73 |
| Evidence        | 0.1  | 0.08 | 0.29 | 0.32 | 24    | 14 | 12%    | 7%    | 2.77  | 4.1  | 0.8          | 0.71 |
| Factualness     | 0.1  | 0.1  | 0.34 | 0.31 | 20    | 21 | 10%    | 10.5% | 3.29  | 3.19 | 0.77         | 0.77 |
| Future Meanings | 0    | 0.01 | 0    | 0.09 | 0     | 3  | 0      | 1.5%  | 0     | 8.29 | 0            | 0.41 |



|                        |      |      |      |      |    |    |       |       |      |      |      |      |
|------------------------|------|------|------|------|----|----|-------|-------|------|------|------|------|
| <b>Idea</b>            | 0.16 | 0.08 | 0.5  | 0.27 | 28 | 16 | 14%   | 8%    | 3.14 | 3.63 | 0.78 | 0.74 |
| <b>News</b>            | 0.01 | 0    | 0.11 | 0    | 3  | 0  | 1.5%  | 0     | 8.24 | 0    | 0.42 | 0    |
| <b>Possibility</b>     | 0.05 | 0.14 | 0.24 | 0.36 | 10 | 31 | 5%    | 15.5% | 4.79 | 2.58 | 0.66 | 0.82 |
| <b>Self-source</b>     | 0.35 | 0.39 | 0.74 | 0.6  | 55 | 72 | 27.5% | 36%   | 2.12 | 1.56 | 0.85 | 0.89 |
| <b>External-source</b> | 0.28 | 0.09 | 0.66 | 0.29 | 47 | 21 | 23.5% | 10.5% | 2.4  | 3.14 | 0.83 | 0.78 |
| <b>Contracting</b>     | 0.25 | 0.18 | 0.52 | 0.44 | 48 | 34 | 24%   | 17%   | 2.07 | 2.47 | 0.85 | 0.82 |
| <b>Expanding</b>       | 0.37 | 0.3  | 0.77 | 0.53 | 55 | 59 | 27.5% | 29.5% | 2.09 | 1.75 | 0.85 | 0.88 |

Focussing initially on the semantic categories, SNTQ structures are not evenly distributed across both languages. *Evaluation*, *Evidence*, *Factualness* and *Idea* stance nouns are the four semantic categories that are evenly distributed, each yielding a Juilland's D score > 0.7 in both English and Spanish. *Cause and Effect* nouns are also used comparably in English and Spanish, but their Juilland's D score is below 0.3, indicating irregularity in the dispersion of these nouns. Overall, of the most common semantic categories in CONVIDES reflect those identified by Charles (2007), who finds *Idea* and *Evidence* nouns to be frequent across disciplines, and Flowerdew and Foster (2015) and Samaniego (2018) who both found "fact" and "idea" nouns to be frequent across disciplines and mode of delivery. Examples 1-6 show how "evidence/evidencia", "fact/hecho", and "idea/idea" serve to attribute the subsequent clause with meaning the nouns hold, respectively.

1. There is **evidence that** we can make behavioural changes following a crisis.
2. Si existen **evidencias de que** el SARS-CoV-2 es un virus manipulado, ¿por qué no se han publicado estas evidencias de las que Luc Montagnier habla en su entrevista?  
(If there is evidence that SARS-CoV-2 is a bioengineered virus, why has the evidence Luc Montagnier talks about in his interview not been published?)
3. But the **fact that** it was already struggling before the outbreak suggests that an interest rate cut and the government's fiscal expansion moves are not enough.

4. Tampoco se define que **el hecho de que** algún alumno o alumna haya perdido a un ser querido deba requerir algún tipo de respuesta educativa desde la tutoría.  
(Nor is it defined that the fact that a student has lost a loved one should require some kind of educational response from the tutoring.)
5. The **idea that** it was already struggling before the outbreak suggests that an interest rate cut and the government's fiscal expansion moves are not enough.
6. Esa **idea de que** estamos en un paréntesis tras el cual todo volverá a la normalidad.  
(That idea that we are in a parenthesis after which everything will return to normal.)

Writers in Spanish and UK contexts attribute content as evidence-based, factual, or as pertaining to an idea. This focus on the content reflects practices associated with formal-oriented cultures (Curry 2021), as writers signal the trustworthiness of the content being presented on COVID-19. Of course, it is difficult to understand the motivation for such a signal, as it may be an attempt to clarify the content for the reader or an opportunity to present a critical evaluation of information, typical of Spanish writing (Salager-Meyer 2011). Examples 5 and 6 illustrate this, where “idea” in 5 appears to indicate that the following point is not a fact or evidence based, while in 6, the noun appears to disparage the point that follows.

The category, *Evaluation*, is noteworthy as writers in each language use stance nouns to express their own judgement on the COVID-19 pandemic, as examples 7 and 8 show. This corresponds somewhat to “locution” nouns in Flowerdew and Foster (2015) which are also less frequent than the likes of “fact” and “idea”; however, “locution” nouns also subsume argumentation, which we have dealt with separately.

7. Following **concerns that** the self-employed were being left out, on March 26 the Chancellor of the Exchequer announced a new support scheme specifically for them, estimated to cost £9bn.
8. Con la enorme **desventaja de que** virus y bacterias pueden cubrir distancias enormes en días o semanas.  
(With the enormous **disadvantage that** viruses and bacteria can cover enormous distances in days or weeks)

These examples demonstrate how writers discussing COVID-19 in UK and Spanish contexts insert their authorial judgements into their texts. This indicates that the writers’ opinions and

perspectives on the COVID-19 pandemic are acceptable aspects of blog writing in both cultural contexts.

The key differences that occur across languages do so in *Future Meanings*, *News*, *Argument*, and *Possibility*. The former two categories are quite infrequent, overall, but merit identification owing to their occurring only in Spanish and English, respectively. While the data is limited, it is interesting that in the Spanish context, consideration is given to the future of COVID-19, and in the UK context, consideration is given to the novelty of information. Example 9 demonstrates how future obligations for addressing COVID-19 are signalled in Spanish.

9. Es el **momento de que** ciudadanos, gobiernos y empresas desarrollen una conciencia de datos y exploren las posibilidades de la tecnología  
(It is time for citizens, governments, and businesses to develop data awareness and explore the possibilities of technology)

Conversely, in English, the use of “news” signalled the novelty of the information discussed, as Example 10 shows.

10. This means **news that** R may have increased above 1 again, particularly in specific regions, may not necessarily mean that current public health measures aren't working or that the disease is about to come roaring back

Given that the COVID-19 pandemic was not yet resolved at the point of data collection and is subject to evolution and scientific scrutiny, the absence of such future- and news-based stances across CONVIDES is somewhat surprising. However, it may be that these meanings are realised through other stance-making devices.

The *Argument* and *Possibility* nouns reflect further apparent cross-cultural variation in CONVIDES. *Argument* nouns, as seen in Example 11, are more frequent and more evenly dispersed in English than Spanish. This category was the second most frequent category in political science writing in Charles (2007) and the fourth most frequent category, overall, in Flowerdew and Foster (2015) under the category of “locution”.

11. Other prominent theories include the **claim that** the virus was accidentally released by the Wuhan Institute of Virology, or that it was deliberately made as a biowarfare weapon, either by the Chinese or the Americans.

The presence of this category in English is not unexpected, given the evidence of hedges and boosters used in English to create arguments (Mur-Dueñas 2011). However, the absence in Spanish calls for further analysis. Spanish writers use boosters more frequently than English writers do (Mur-Dueñas 2011). Given the long recognised, intrinsic value of boosters for constructing arguments (Hyland 2015), the infrequent use of argumentative nouns in SNTQ structures in Spanish may reflect a decision by writers in the Spanish context to avoid presenting stance noun-driven arguments on COVID-19. Whether this is motivated by register constraints or by the subject matter of blog posts, it is impossible to discuss here without looking at a wider range of stance-taking devices and their impact on argumentation.

What we do know, however, is that *Possibility* nouns, reflected in Example 12, are quite common and evenly dispersed in Spanish and less so in English. The low frequency in English is consistent with Charles (2007) and Flowerdew and Foster (2015) in which *Possibility* nouns and “modal facts” are among the least frequent semantic categories. Therefore, the frequency of *Possibility* nouns in Spanish reflects a clear cross-cultural variation, where the act of stance-taking is linked to writers signalling a lack of certainty.

12. Ni acerca de la **posibilidad de que** los sistemas sanitarios se tambalearan, incluso sucumbieran, colapsados por un elevado número de pacientes  
(Nor about the possibility that health systems would falter, even succumb, collapsed by a large number of patients)

Spanish writers in CONVIDES adopt less certain stances than the English writers do when framing COVID-19 with SNTQ structures. This is especially noteworthy given that Spanish academic writers consistently use hedges to express doubt less frequently than English writers do (cf. Lee & Casal 2014; Mur-Dueñas 2011).

Moving to discuss the use of sources to support writer stance, self-sources display similar mean frequencies and dispersion scores in the English and the Spanish subcorpora, and a slightly higher range of dispersion in English, as evidenced in Table 3. However, external sources display a diverging trend, with greater mean frequency and range in English, and a relatively comparable dispersion score. Generally, self-sources are remarkably frequent in

CONVIDES. When compared to Charles (2007) and Jiang (2017), the use of self-sources in the English CONVIDES subcorpus is much greater. Therefore, it appears to be a specific feature of academic blog writing. This finding corresponds with Biber and Egbert's (2018) finding that opinion blogs present personal opinions that are not necessarily supported with evidence. Interestingly, this use of self-sources demonstrates the hybrid nature of the academic blog genre (Zou & Hyland 2019; 2020), which diverges from writing practices typical of research articles and reflects other parent genres, such as opinion blogs.

For Spanish, the focus on self-sources is less surprising, given that Spanish academic writing often necessitates fewer citations (Luzón 2015). Interestingly, a key feature of blogs is the ease with which multimodal sources and hyperlinks to other sites are included in texts (Yus 2011). Therefore, the preference for self-sources in SNTQ structures appears to be more closely linked with issues of authority. Examples A and D both demonstrate a stance based on evidence and facts. However, both are examples of self-sources, as no evidence is provided in the texts to support these stances. Overall, the lack of source use when taking stances on COVID-19 through SNTQ structures tells us that academics in Spanish and UK contexts can position themselves as authoritative writers who do not require explicit evidence in discourse to support claims.

Finally, in terms of strategies, both English and Spanish SNTQ structures in CONVIDES make use of expanding and contracting strategies to a similar frequency, range, and dispersion. Overall, expanding strategies are more frequent in both the English and Spanish subcorpora. This finding directly conflicts with Liardét and Black (2019), who find that contracting strategies are most typical in expert writing in academic research articles. At least in the context of SNTQ structures, expert writers of academic blogs appear to entertain multiple perspectives in their texts in a way that they do not in research articles. Example 13 shows how the writer indicates that the clause that follows “possibility that” is not certain but one of several possible outcomes.

13. This means there is a **possibility that** you could test positive without being immune and so these tests may not be as helpful as people are hoping.

Similarly, in Spanish, expanding strategies are used as a preamble to devices such as rhetorical questions that seek to engage readers with shared knowledge and assumptions (Zou & Hyland 2020) about how the scientific method works and how science communicates findings, as Example 2 demonstrates.

Overall, while language reflects a key variable in analysing writing across cultures, discipline has been found to reflect important variability in the use of metadiscursive markers (Salager-Meyer 2011). Therefore, the following section further investigates these findings with a view to unpack disciplinary variations in the use of SNTQ structures in the English and Spanish CONVIDES subcorpora.

### 4.3 Disciplinary variation

Hard and soft scientists seem to use a wide range of semantic noun categories in the English and Spanish CONVIDES subcorpora. Hard science bloggers in the English subcorpus of CONVIDES mainly use *Evidence*, *Possibility*, and *Factualness* meanings, in descending frequency. *Evidence* meanings in English posts account for almost 30% of all instances while in Spanish the frequency is approximately half of that (16%). In the Spanish subcorpus, *Possibility* (44.4%) and *Factualness* (33.3%) are used more frequently. It is relevant, though, that *Idea*, *Evaluation*, *Cause and Effect*, and *Expressing Future Meanings* are not used in the Spanish hard science blogs. While Charles (2007) finds *Evidence* to be an important category for hard sciences, a trait shared in our study, she finds *Possibility* to be very infrequent in hard sciences. Notably, Spanish hard science bloggers do not avoid *Possibility* meanings. This is exemplified in Example 14, which shows pharmacologists speculating about medicine shortages.

14. En España, la **posibilidad de que** se produzcan faltas de medicamentos y equipamiento sanitario ya aparece en el manual de gestión de la crisis del Ministerio de Sanidad.

(In Spain, the possibility of shortages of medicines and health equipment already appears in the crisis management manual of the Ministry of Health)

Modal facts and possibility nouns are not typically frequent in English academic writing (Charles 2007; Flowerdew & Foster 2015) and hedges appear to be infrequent in Spanish academic writing (Lee & Casal 2014; Mur-Dueñas 2011), especially in the hard sciences (Salager-Meyer 2011). Therefore, the uncharacteristic use of *Possibility* nouns in Spanish may reflect a genuine lack of certainty surrounding COVID-19 that the Spanish writers wish to communicate to their audience. Notably, this lack of certainty, more typical of English

academic writing and hard sciences, is not signalled in the English CONVIDES parascientific texts.

In soft science blogs in CONVIDES, English and Spanish language writers make use of *Idea*, *Factualness* and *Evidence* meanings. While the English subcorpus of CONVIDES makes use of *Evaluation* (18.1%) and *Argument* (17%) meanings, these are, for the most part, absent from the Spanish data, where *Possibility* (31%) plays a substantial role over both *Idea* (17.2%) and *Factualness* (16%) meanings. This demonstrates clear cross-linguistic variation in soft science writing. Largely dealing with issues of COVID-19 and economy, policy, and society, writers in CONVIDES make use of SNTQ structures to make judgements and propositions in English but express uncertainty and the factual and ideational nature of the propositional content. In many ways, these findings may diverge from expectations based on research article writing, which typically is less critical and more explicit in English than in Spanish (Salager-Meyer 2011). Arguably, the SNTQ structures may be highlighting that COVID-19 pandemic is ushering writers to modify their practices and communicative behaviours.

In terms of use of sources and strategies across disciplines, blog posts written by hard scientists display diverging preferences across CONVIDES. While English SNTQ structures facilitate both expanding and contracting strategies, 77.7% in the Spanish data occur in the context of entertaining other views. This is often coupled with the use of the subjunctive mood (Example 15) or it is used as a preamble to rhetorical questions, as in Example 2.

15. El análisis de la red de vuelos internacionales (RVI) y el **hecho de que** el virus pueda propagarse de forma desapercibida nos sugiere una razón adicional  
(The analysis of the international flight network (IFN) and the fact that the virus may spread quietly suggests a further reason)

Questions serve to engage readers directly in texts (Curry 2021). Therefore, the preference for expanding strategies when taking a stance with SNTQ structures in Spanish writing may reflect a cultural value of openness to other perspectives on COVID-19 that is less apparent in English.

Soft science posts in CONVIDES display a preference for expanding strategies in both languages. Stance nouns and their complementing *that*-clauses in this context are particularly useful as they appear to present stanceless *facts* while articulating dialogic interactions with the readers and the ideas and beliefs held by other actors. This is an important finding, as it holds clear implications for readers in both contexts, who may expect more contracted stances

when discussing a matter of such consequence i.e. COVID-19. This is especially so in the case of academic readers (cf. Liardét & Black 2019).

For source use, hard science academics prefer self-sources in the Spanish subcorpus of CONVIDES (75%), often together with the subjunctive mood, as in Example 16. In 16, the writer does not draw on any evidence or sources to take this stance, rather they present this from their own authority. The lack of medical evidence cited to make this case is noteworthy and indicates that Spanish authors realise their authority when disseminating information on COVID-19 to the public.

16. Si la diversidad genética se reduce porque las poblaciones disminuyen, la **probabilidad de que** aparezcan resistencias disminuye también.

(If genetic diversity is reduced as a result of shrinking populations, the probability of resistance to the virus will decrease.)

This pattern of self-sources in Spanish hard sciences may be a response to anti-intellectual stances in public domains that discredit published research (Merkley 2020). In the context of COVID-19, it may be that academics want to appear as the source of knowledge, as opposed to using a secondary source. Interestingly, despite anti-intellectualism being a global phenomenon (Merkley 2020), in the UK, self-sources are less frequently used in hard science blogs in CONVIDES. Nonetheless, they remain an important feature of SNTQ structures in the English subcorpus of CONVIDES as they are found in almost 55% of the English instances analysed.

Overall, the inclination to present a more balanced distribution of self- and external-sources may be a specific feature of academic blog writing in English. This may require a complex interaction of a wealth of sources and stance making devices. However, it is not only in the hard sciences where we discover a preference for self-sources. Overwhelmingly, Spanish COVID-19 posts rely on the authors engaging readers in ways that deliberately hide the origin of their claims, creating a space for self-representation as experts and, we argue, the cultivation of distinctive social knowledge-making practices that are unique to the Spanish language context.

The posts analysed can reveal how knowledge is constructed, negotiated and made persuasive through stance making and the co-selection of sources and strategies. Overall, the findings reveal a cross-linguistic and cross-disciplinary preference for entertaining other views and self-sourcing. This indicates that academic blogs differ, generally, for research articles and



draw writing practices and rhetorical strategies from other parent genres, like opinion blogs. Moreover, in the context of COVID-19, we see academic writers avoiding contracting views and using self-sources, owing potentially to the lack of clarity on the COVID-19 pandemic in Spain and the UK and the need to signal authority on this matter to the wider public. These practices appear incongruent with existing knowledge on writing cultures in Spain and the UK, which indicates that writers in CONVIDES are modifying their practices when discussing the COVID-19 pandemic, at least with regard to their use of the SNTQ structure.

## **5 Conclusion**

This paper aimed to unpack the use of SNTQ structures in academic blogs in CONVIDES to determine cross-linguistic correspondence, similarities and differences in the use of sources and strategies, and what their usage can tell us about COVID-19 in Spain and the UK. Broadly, SNTQ structures correspond in CONVIDES, in terms of frequency and dispersion. While Spanish has been found to exploit significantly fewer metadiscourse markers to create writer-reader interaction, this is not the case when compared to English in CONVIDES. Therefore, SNTQ structures appear to play a valuable role in framing the COVID-19 pandemic in each language. However, primary differences occur in semantic categories and use of expanding and contracting strategies, across disciplines.

In the context of COVID-19, our study has shown that stance practices in academic blogs written by expert authors can vary considerably across language and disciplinary group, and can vary in comparison to academic texts, such as the research article, in terms of SNTQ structures. Our findings show that inter-disciplinary variation is not a constant across the two languages/academic cultures analysed. For example, despite differences across the disciplines, in English posts, both hard and soft scientists make use of the full spectrum of meanings available. This is less apparent in Spanish, where disciplinary variation plays an important role. Furthermore, our data confirm that expanding strategies and self-sources create specific scenarios for the management of authorial stance through SNTQ structures, which differ from academic writing practices in research articles, for example. Following Biber and Egbert (2018), the hybridity of the registers may explain this variation. However, we may argue that some of the inter-disciplinary variation may equally be explained by the circumstances surrounding the emergence and development of COVID-19.

The COVID-19 posts discussed in this research seem to afford the expression of possibility meanings as researchers and governments worldwide struggle to understand the science behind the development of the pandemic. In this way, CONVIDES is an unusual corpus

as it captures academic communication in a context of uncertainty like no other academic corpus we have used before in corpus studies. Scientific communication has been analysed in the past by looking at science as a product, using reconstructed logic (Schiffrin, 1987). The COVID-19 pandemic is perhaps providing linguists with the opportunity to examine science-as-process across cultures, exposing the debates and the positioning of the scientific community towards the COVID-19 pandemic. As such, it is crucial that we gain a better understanding of writers' practices when framing critical social issues such as COVID-19. This is especially the case, given that already this research has shown that the varied use of authorial stance through SNTQ structures can empower writers to present information on COVID-19 that draws on persuasion and argumentation in lieu of the objectivity and empiricism readers may expect.

Overall, our contrastive study of academic blogs in CONVIDES offers perspectives on English and Spanish blog writing, stance-taking, source-using, and engagement strategy facilitation with regards to the SNTQ structure. While this delimited focus means that we cannot comment on stance-taking more generally, overall, this paper offers methodological contributions and insight into the framing of COVID-19 in Spain and the UK. The contrastive analysis of stance noun semantic categories, (non-)use of sources, and engagement strategies in SNTQ structures allows us to understand how scientists position their knowledge when reaching out to a wider audience. This may not only serve new insights into reader engagement but also it can broaden our claims about digital scholarship in the wake of the third decade of the 21<sup>st</sup> century. Looking forward, we intend to further investigate and expand upon CONVIDES to gain a broader and deeper understanding of academic dissemination of COVID-19 research. For now, we have begun to shed light on how writers in Spanish and UK contexts frame and realise the COVID-19 pandemic through SNTQ structures. Moreover, we have added a much-needed insight into the language of this novel genre in the multilingual academy. Further studies merging methodological approaches in contrastive analyses of writer stance can help to produce a more comprehensive knowledge base of contemporary practices in academic blog communication and knowledge dissemination on COVID-19 from a multilingual perspective.

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## Appendices

Appendix 1. Stance nouns in *The Conversation UK*. Top 5 nouns show their cotext, source and strategy annotation, semantic group, URL and date of publication.

| Noun  | Frequency | Normalized Freq. / 1 M |
|---|-----------|------------------------|
| fact  | 23        | 111.9                  |
| <b>Cotext:</b> The [fact] that the UK has reached the grim milestone of having the highest death toll in Europe shows we need more robust data collection in order to respond better to this crisis.<br><b>Annotation:</b> External, contracting<br><b>Semantic group:</b> factualness<br><b>Source:</b> <a href="https://theconversation.com/coronavirus-record-ethnicity-on-all-death-certificates-to-start-building-a-clearer-picture-137860">https://theconversation.com/coronavirus-record-ethnicity-on-all-death-certificates-to-start-building-a-clearer-picture-137860</a><br><b>Date:</b> 11/05/2020                     |           |                        |
| evidence  | 15        | 73.0                   |
| <b>Cotext:</b> ...the UK Chancellor of the Exchequer Rishi Sunak pointed to a lack of [evidence] that interventions like closing borders or travel bans are going to have a material effect on the spread of the infections...<br><b>Annotation:</b> External, expanding<br><b>Semantic group:</b> evidence<br><b>Source:</b> <a href="https://theconversation.com/coronavirus-the-pressures-governments-face-in-balancing-safety-and-liberty-133466">https://theconversation.com/coronavirus-the-pressures-governments-face-in-balancing-safety-and-liberty-133466</a><br><b>Date:</b> 12/03/2020                                |           |                        |
| claim   | 12        | 58.4                   |
| <b>Cotext:</b> Many people have tended to regard Thatcher's [claim] that "there is no such thing as society" with moral revulsion, as some sort of expression or defence of individualistic selfishness.<br><b>Annotation:</b> External, expanding<br><b>Semantic group:</b> argument<br><b>Source:</b> <a href="https://theconversation.com/why-theres-no-such-thing-as-society-should-not-be-regarded-with-moral-revulsion-136008">https://theconversation.com/why-theres-no-such-thing-as-society-should-not-be-regarded-with-moral-revulsion-136008</a><br><b>Date:</b> 24/04/2020  |           |                        |
| idea  | 12        | 58.4                   |
| <b>Cotext:</b> Technological advancement, such as the development of telegraph lines, also generalised the [idea] that news from incoming epidemics could be received earlier, and better averted and monitored through prediction rather than prevention.<br><b>Annotation:</b> Self-source, expanding<br><b>Semantic group:</b> idea<br><b>Source:</b> <a href="https://theconversation.com/quarantine-used-to-be-a-normal-part-of-life-and-wasnt-much-liked-then-either-135245">https://theconversation.com/quarantine-used-to-be-a-normal-part-of-life-and-wasnt-much-liked-then-either-135245</a><br><b>Date:</b> 08/04/2020 |           |                        |
| concern   | 8         | 38.9                   |
| <b>Cotext:</b> There is a particular [concern] that healthcare providers and essential industries may not be able to procure personal protective equipment (PPE) for their staff.<br><b>Annotation:</b> Self-source, expanding  |           |                        |

|  |     |      |
|--|-----|------|
| <b>Semantic group:</b> evaluation  |     |      |
| <b>Source:</b> <a href="https://theconversation.com/coronavirus-why-you-need-to-wear-a-face-mask-in-france-but-not-in-the-uk-137856">https://theconversation.com/coronavirus-why-you-need-to-wear-a-face-mask-in-france-but-not-in-the-uk-137856</a> |     |      |
| <b>Date:</b> 05/05/2020  |     |      |
| sign   | 8   | 38.9 |
| belief   | 6   | 29.2 |
| possibility  | 6   | 29.2 |
| announcement   | 3   | 14.6 |
| coincidence  | 3   | 14.6 |
| doubt  | 3   | 14.6 |
| news   | 3   | 14.6 |
| notion   | 3   | 14.6 |
| suggestion   | 3   | 14.6 |
| theory   | 3   | 14.6 |
| argument   | 2   | 9.7  |
| criticism  | 2   | 9.7  |
| reason   | 2   | 9.7  |
| recognition  | 2   | 9.7  |
| shame  | 2   | 9.7  |
| surprise   | 2   | 9.7  |
| view   | 2   | 9.7  |
| assumption   | 1   | 4.9  |
| commitment   | 1   | 4.9  |
| danger   | 1   | 4.9  |
| difference   | 1   | 4.9  |
| faith  | 1   | 4.9  |
| intelligence   | 1   | 4.9  |
| issue  | 1   | 4.9  |
| law  | 1   | 4.9  |
| opinion  | 1   | 4.9  |
| point  | 1   | 4.9  |
| presumption  | 1   | 4.9  |
| principle  | 1   | 4.9  |
| probability  | 1   | 4.9  |
| realisation  | 1   | 4.9  |
| recommendation   | 1   | 4.9  |
| scenario   | 1   | 4.9  |
| sense  | 1   | 4.9  |
| suspicion  | 1   | 4.9  |
| trust  | 1   | 4.9  |
| Total  | 144 | 701  |

Appendix 2. Stance nouns in *The Conversation Spain*. Top 5 nouns show their cotext, source and strategy annotation, semantic group, URL and date of publication.

| Noun   | Frequency | Normalized Freq. / 1 M |
|--|-----------|------------------------|
| hecho  | 24        | 116.8                  |
| <p><b>Cotext:</b> El [hecho] de que las medidas de contención de la epidemia no hayan sido adoptadas simultáneamente en todos los países, nos obliga a...</p> <p><b>Annotation:</b> Self-source, expanding</p> <p><b>Semantic group:</b> factualness</p> <p><b>Source:</b> <a href="https://theconversation.com/turismo-en-tiempos-de-covid-19-de-la-masificacion-al-distanciamiento-social-137567">https://theconversation.com/turismo-en-tiempos-de-covid-19-de-la-masificacion-al-distanciamiento-social-137567</a></p> <p><b>Date:</b> 29/04/2020</p>  |           |                        |
| caso   | 12        | 58.4                   |
| <p><b>Cotext:</b> La Liga, que la pasada temporada ingresó 4.479 millones de euros, ha hecho una estimación de las pérdidas en el [caso] de que la Primera y la Segunda división sean canceladas definitivamente.</p> <p><b>Annotation:</b> external, expanding</p> <p><b>Semantic group:</b> possibility</p> <p><b>Source:</b> <a href="https://theconversation.com/el-covid-19-paraliza-la-industria-deportiva-menos-ingresos-mas-geopolitica-134121">https://theconversation.com/el-covid-19-paraliza-la-industria-deportiva-menos-ingresos-mas-geopolitica-134121</a></p> <p><b>Date:</b> 20/03/2021</p> |           |                        |
| probabilidad   | 7         | 34.1                   |
| <p><b>Cotext:</b> Si la diversidad genética se reduce porque las poblaciones disminuyen, la [probabilidad] de que aparezcan resistencias disminuye también.</p> <p><b>Annotation:</b> Self-source, expanding</p> <p><b>Semantic group:</b> possibility</p> <p><b>Source:</b> <a href="https://theconversation.com/asi-influyen-los-cambios-medioambientales-en-la-aparicion-de-nuevas-enfermedades-131778">https://theconversation.com/asi-influyen-los-cambios-medioambientales-en-la-aparicion-de-nuevas-enfermedades-131778</a></p> <p><b>Date:</b> 16/02/2020</p>  |           |                        |
| posibilidad  | 7         | 34.1                   |
| <p><b>Cotext:</b> Las redes sociales se han hecho eco ampliamente de la [posibilidad] de que la administración de vitamina D pudiera ser un factor fundamental en el tratamiento y prevención de COVID-19.</p> <p><b>Annotation:</b> external, expanding</p> <p><b>Semantic group:</b> possibility</p> <p><b>Source:</b> <a href="https://theconversation.com/pueden-los-suplementos-de-vitamina-d-prevenir-o-curar-la-covid-19-136145">https://theconversation.com/pueden-los-suplementos-de-vitamina-d-prevenir-o-curar-la-covid-19-136145</a></p> <p><b>Date:</b> 13/04/2020</p>                          |           |                        |
| evidencia  | 6         | 29.2                   |



**Cotext:** Si existen [evidencias] de que el SARS-CoV-2 es un virus manipulado, ¿por qué no se han publicado estas evidencias de las que Luc Montagnier habla...?

**Annotation:** Self-source, expanding.

**Semantic group:** evidence

**Source:** <https://theconversation.com/el-virus-de-la-covid-19-ni-se-creo-ni-se-escapo-de-un-laboratorio-136773>

**Date:** 20/04/2020

|                |   |      |
|----------------|---|------|
| duda           | 5 | 29.2 |
| riesgo         | 3 | 14.6 |
| idea           | 3 | 14.6 |
| evidencias     | 3 | 14.6 |
| afirmación     | 3 | 14.6 |
| necesidad      | 2 | 9.7  |
| momento        | 2 | 9.7  |
| impresión      | 2 | 9.7  |
| hipótesis      | 2 | 9.7  |
| conciencia     | 2 | 9.7  |
| causa          | 2 | 9.7  |
| virtud         | 1 | 4.9  |
| ventaja        | 1 | 4.9  |
| signo          | 1 | 4.9  |
| señal          | 1 | 4.9  |
| sensación      | 1 | 4.9  |
| seguridad      | 1 | 4.9  |
| sabiendas      | 1 | 4.9  |
| reserva        | 1 | 4.9  |
| reflexión      | 1 | 4.9  |
| reconocimiento | 1 | 4.9  |
| punto          | 1 | 4.9  |
| premisa        | 1 | 4.9  |
| posibilidades  | 1 | 4.9  |
| paradigma      | 1 | 4.9  |
| opción         | 1 | 4.9  |
| muestra        | 1 | 4.9  |
| mensaje        | 1 | 4.9  |
| inconveniente  | 1 | 4.9  |
| expectativas   | 1 | 4.9  |

|               |     |     |
|---------------|-----|-----|
| entelequia    | 1   | 4.9 |
| ejemplo       | 1   | 4.9 |
| dudas         | 1   | 4.9 |
| desventaja    | 1   | 4.9 |
| creencia      | 1   | 4.9 |
| convicción    | 1   | 4.9 |
| constatación  | 1   | 4.9 |
| constancia    | 1   | 4.9 |
| conocimiento  | 1   | 4.9 |
| conclusión    | 1   | 4.9 |
| complejidad   | 1   | 4.9 |
| cliente       | 1   | 4.9 |
| circunstancia | 1   | 4.9 |
| certeza       | 1   | 4.9 |
|               | 118 | 574 |

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