

# Constructing stance by means of attribution: How is the ‘evaluative space’ filled in science popularizations in English?

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## INTRODUCTION

If we wondered how people learn about science and scientific achievements once schooldays are left behind, we would conclude, as Hyland does (2010: 118), that most people access scientific knowledge through the media rather than through other types of information sources, including popular science books. Probably for this reason, nowadays daily newspapers have started to include, as they have been doing for ages with other special-topic sections such as economy or entertainment, specialized science sections where scientists or special journalists make scientific achievements public. These popularization articles are steadily increasing their production in the press and their evolution into this unprecedented visibility can be related to the view that popularizations are essential to fill what Calsamiglia and López Ferrero (2003: 147) have defined as “the traditional gap” between the scientific community and the lay people, thus acting as what Moirand (1997) considers a meeting point, or “la rencontre entre science et médias” or “modes discursifs rencontrés” (1997: 34). Thus, in doing so, science popularizations may be said to have a unique character within the wide range of genres that we can find in newspaper discourse.

This paper focuses on how popularizations construct stance along the narration of the scientific findings. Our aim is to see if there is a rhetorical construction of authorial stance which can be associated to the journalist’s introduction of speech attributed to external sources in this type of text in particular. The rationale here is that the introduction of an external voice requires some transition from the current voice (typically the journalist’s) to the new one, and that this transition can be defined as an *evaluative space*. In this respect, popularizations seem to present a fruitful potential because, as Hyland posits, journalism, politics, and media discourses “are likely to yield the richest crop of explicitly evaluative examples” (2005: 175). Therefore, we are interested in studying how external sources of attribution are introduced by science journalists in the text to see if (and how) they use the precedent evaluative space to contribute to the construction of argument. We will argue that journalists construct stance in those evaluative spaces by two combined means, namely by (either covertly or overtly) evaluating the situation expressed by the external source (the attributee of the information signalled as reported), and also by covertly blurring the boundaries between his/her voice and the attributee’s voice so that the readers cannot establish clearly who is speaking. In order to support and illustrate this, we present an analysis of the features of the evaluative space opening when journalists introduce other people’s voices by means of direct speech (re)presentations in the narration of the scientific findings, in a corpus of sixty-six popularization articles from *The Guardian* newspaper.

## POPULARIZATION ARTICLES AS DISCOURSE

Popularization articles are written by either scientists themselves or science journalists, i.e. journalists specialized in either a specific field of science or also in the popularization process itself, who have a variety of aims. As Connie St. Louis, chair of the Association of British Science Writers, has pointed out in an interview for the blog ‘The lay scientist’ (Robbins 2011), science journalists are expected to contribute original reporting, to provide context to their readers, to challenge statements made by university press officers, or even just to add informed opinion to their reports

and, in this sense, they are not particularly different from the rest of what Martin and White (2005) call “correspondents” in that we do not expect them to be absolutely ‘invisible’ in the text, as is the case with the reporters of ‘hard’ news.

On the other hand, although most descriptive studies on popularizations take a contrastive perspective aimed to highlight differences between research articles and them, in order to analyse if and how stance is constructed, popularization articles are better described *per se*. The rationale for this is that contrastive studies often approach popularizations as second-rate texts which are considered just simplified and more-easily-digestible versions of research articles but in our view a more fruitful approach is to take them as “a discursive reconstruction of scientific knowledge to an audience other than the academic one” (de Oliveira and Pagano 2006: 628). From this perspective, popularizations constitute a certain (re)contextualization of scientific knowledge which shares features of both newspaper and scientific discourse, being at the crossroads of them along their respective continuum lines of potential (re)contextualizations (Elorza 2011), and whose characteristic features include (and also share with other newspaper and scientific genres) that the presentation of others’ words is central. Semino (2009) has suggested that this textual polyphony (Ducrot 1986) is present in newspapers not only because journalists are seldom direct witnesses or actors of the events they are narrating, but more importantly because “what count as ‘new’ is often what people **say** rather than what they **do**” (Semino 2009: 447, emphasis original). Therefore, the construction and development of popularizations rely on the combination of different voices, which help structure and organise the text. Voices combine in such a way that the writer’s voice is taken as the “unmarked” option within the systematic framework of options available, whereas the other voices are introduced in the text by some of the available options of speech (re)presentation.

The flow of voices so typically found in this type of discourse follows what De Beaugrande (1991) calls the “good reason” principle, by which it is the unmarked option of interpretation of who is speaking in each moment along the text which is chosen “unless there is good reason to choose otherwise”. This means that both writers and readers tacitly accept that, unless some explicit directions for alternative interpretations are given or implied, the voice speaking in the text is the writer’s. Additionally to the question of who is speaking, another relevant issue is the alignment or the position of the journalist with what is being narrated or, in other words, how the journalist’s voice as a news narrator is constructed, showing thus his/her personal *stance*.

#### THE ANALYSIS OF STANCE AS ARGUMENTATIVE EVALUATION IN THE ‘EVALUATIVE SPACE’

Hunston and Thompson (2000: 6) contend that *evaluation* has three different functions, namely to express the writer’s opinion, to construct and maintain relations between writer and reader, and to organize the discourse. In this sense, Hunston argues that evaluation plays a vital role in constructing the ideological basis of a text because it locates writer and reader in “an ideological space” which is “constructed both by the way the world is labelled [...] and by the way the argument is constructed” (2000: 205). In this so-called “evaluative space” the writer can “report the propositions without being committed to their validity and can thus prepare for the contrast between the general view and his own” (Thompson and Ye 1991: 369). The question we want to answer is how this ideological space is constructed when the journalist ‘gives voice’ to an external source of information by introducing in the text somebody else’s speech is (re)presented in the text as Direct Speech (DS henceforth).

In our study we consider *stance* a cover term which includes, along Conrad and Biber’s (2000) interpretation, a variety of meanings, thus taking it as “the overt expression of the speaker’s attitudes, feelings, judgements, or commitment concerning his/her message, including the indication of the speaker’s degree of commitment towards the truthfulness of the message” (Bednarek 2006: 25) so that these meanings relate to the certainty of a proposition, its reliability (or

not), the writer's comments on the source of information, the writer's attitudes or value judgements, or also the manner how the information is presented (Conrad and Biber 2000: 56). As these meanings can be constructed by a wide range of linguistic means, stance is not easily perceived. Bondi and Mauranen point out how, "[a]s readers and writers, we seem to be vaguely aware of evaluation being constructed in texts we encounter and produce; it is harder to tell exactly how this happens, that is, which linguistic means are involved, and which (if any) are not" (Bondi and Mauranen 2003: 269). Therefore, the analysis of stance presents methodological difficulties because, as Silver argues, even though there has been a recent interest in the multiplicity of ways in which evaluation is expressed in language, "[g]eneral categories or markers are rethought and broken down as they are made to pass through the analytic sieve of experimental work from a host of linguistic perspectives" (Silver 2005: 360). Categories include epistemic, attitudinal and style stance adverbials (Conrad and Biber 2000), patterns as the ones discussed by Hunston and Sinclair (2000) in their "local grammar of evaluation", components as the three considered by Hyland (2005: 178), namely *evidentiality*, *affect* and *presence*, which includes *hedges*, *boosters*, *attitude markers* and *self-mentions*, as well as other grammatical devices described by Biber (2004: 112), namely *modals and semi-modals*, *stance adverbials* (including *attitudinal adverbials*, *non-factive adverbials*, *factive adverbials* and *likelihood adverbials*) and *complement clauses* (*that complement clauses* and *to complement clauses*), not to mention all the classes and subclasses considered by Martin and White's (2005) in their *appraisal model*.

Another symptom of the elusiveness of this concept is also manifest in the variety of terms overlapping, namely *stance* (Biber 2006; Conrad and Biber 2000), *evaluation* (Bednarek 2006; Hunston and Thompson 2000) and *appraisal* (Martin 2000; Martin and White 2005), which require further clarification in order to describe the approach adopted to carry out the analysis, as we are only concerned with a specific type of evaluative process.

As Bednarek (2006: 24-25) explains so illuminatingly, *evaluation* is not only used as an alternative term to *stance*, but also as a "technical category", a discourse organizer consisting of the logical connection between clauses by means of the pattern SITUATION+EVALUATION, as in 'I saw the enemy approaching' [SITUATION]. 'This was a problem' [EVALUATION] (Hoey 2000: 29), where the SITUATION clause gives a description and the EVALUATION clause "tells us something about the writer's thoughts, feelings and interpretations in connection with this situation" (Bednarek 2006: 25). This type of pattern, as Hoey explains, is typically found in scientific discourse: "The more normal practice in scientific argumentation is that either an evaluation is offered and then a reason for that evaluation and basis follow, or the situation is presented first and then evaluated" (Hoey 2000: 32).

Our concept of evaluation is based on Winter's conception that any clause gives "two kinds of fundamental information, what is known and what is felt" (in Hoey 2000: 32). Although this concept of evaluation relies on a clausal relationship, in our view it can also be fruitfully applied to analyse other units which are also linked by means of logical connection, such as the interpersonal relation established between the journalist's voice and the attributee's voice in the text, as in Example 1 below, in which the first clause presents a SITUATION, the second clause presents the EVALUATION, and the subsequent quotation, consisting of a series of clauses, makes explicit the BASIS for the previous EVALUATION:

#### Example 1

Preventing EE2 from having environmental or health effects is **difficult**, however. "Ethinyl estradiol is a very potent chemical," said Professor Susan Jobling of Brunel University. "It is designed to have effects in the human body at very low levels. That means it will also have a significant impact in the environment." (TG\_53\_ENG)

In this example, the adjective *difficult* is used to evaluate the possibilities of “Preventing EE2 from having environmental or health effects” and the BASIS for this EVALUATION is constructed by rephrasing (part of) the elements already present in the SITUATION: [EE2 + environmental or health effects] → [Ethinyl estradiol + effects in the human body + impact in the environment]. At the same time, we can see that, whereas we can say that the words used as BASIS are attributed to Professor Jobling, it is not that clear whether the SITUATION and the EVALUATION have also been uttered by her, or rather by the journalist. The fact that the BASIS is the only element of the pattern presented as DS implies that a change has been produced in the current voice speaking. The problem is that although the inverted commas mark the presentation of words unmistakably attributed to Prof. Jobling, the commas would not tell us if that voice was already uttering the previous words as well. The ambiguity on the voice who is speaking at a certain time along the text is interpreted here on the basis that, at least in English, the different possibilities for presenting others’ speech in the text are not clear-cut categories, but rather envisaged more accurately as distributing along a cline of speech (re)presentation (Leech and Short 1981; Semino, Short and Culpeper 1997; Semino 2009).

On the other hand, Example 1 presents an evaluation which is made explicit so that readers can identify that a claim has been made and, therefore, as Hoey (2000: 32) points out, the claim can be potentially questioned by the readers. However, he also posits that a “potentially contentious evaluation” can be “deliberately defused of its power to create argument by its placement at a rank lower than the sentence”, in what he calls “the Emperor’s new clothes gambit” (Hoey 2000: 33), and which operates like this: “where the evaluation takes the form of the premodification of a noun as opposed to the complement position in a sentence, it is more readily regarded by writer and reader as given information or common ground. It is therefore for this reason also less subject to careful scrutiny” (Hoey 2000: 33), an example of which can be found below:

#### Example 2

Until now, the earliest evidence of humans in Britain came from Pakefield, near Lowestoft in Suffolk, where a set of stone tools dated to 700,000 years ago were uncovered in 2005. **More sophisticated** stone, antler and bone tools were found in the 1990s in Boxgrove, Sussex, which are believed to be half a million years old.

“The flint tools from Happisburgh are relatively crude compared with those from Boxgrove, but they are still effective,” said Stringer. (TG\_22\_ENG, our emphasis)

Writers, therefore, have the means to control what information is presented as open to discussion or rather as taken for granted. In Example 2, that the stone, antler and bone tools are “more sophisticated” is not presented as ‘new’ questionable information but is just part of the topic of that sentence, the new information being their finding in Boxgrove in the 1990s. However, it is interesting that the function of the quotation in relation to this previous information is to ‘intensify’ the comparison in terms of sophistication, just introduced in the evaluative space preceding the quotation, being both, evaluative space and quotation, lexically cohesive by associating “sophisticated” and “relatively crude”. Within the argumentative pattern, we can say that the quotation is used as BASIS for the EVALUATION, as was the case in Example 1. This evaluative space, consequently, can be used to introduce evaluation which is questionable (explicit, covert evaluation), but also evaluation which is taken for granted (overt evaluation).

Other ways of presenting taken-for-granted information in narrative reports also include the use of illocutionary reporting verbs, as the verb “fear” in Example 2 above. The rationale here is that, although reporting verbs such as *say* only function as introducers of the reported speech, either DS or not, there are verbs which also add some force to the presentation of the speech. In Semino and Short’s (2004) classification, these verbs are identified with speech presentations under the

category of “Narrator’s representation of speech acts (NRSA)”, which is outlined like this: “Reference to the speech-act value or illocutionary force of an utterance (often with an indication of the topic)” (Semino 2009: 448). However, in Example 2 above, the verb *fear* is used by the journalist to add information about how the attributees (“the biologists”) **feel** about the information attributed to them, what Sanders (2010: 229) describes as an “implicit viewpoint” constructed by means of a verb of emotion.

Reporting verbs do not necessarily refer to the wording produced in a language event, but also to the thoughts produced (*mindsay* verbs), as well as to the writing when the language event has been produced in written form. As Sanders points out, “in direct and indirect representation mode it is the reporting verb that indicates whether the represented utterance was spoken or thought. In free indirect representation mode, the context will have to clarify this” (Sanders 2010: 229). In this sense, free indirect speech (FIS henceforth) does not behave in the same way as DS or IS, as it seems to present a higher degree of implicitness or reliance on other contextual and co-textual elements.

Focusing on how argumentation is constructed in the British press, Smirnova (2009) has studied the use of reported speech as one of the elements employed by journalists to construct newspaper argumentation. In her study, she has focused on both the syntactic structures used to introduce reported speech as well as the semantic characteristics of those structures, being able to identify two broad groups, namely **literal structures**, which incorporate the quoted utterance as “belonging to someone else and [aiming] at a verbatim reproduction of the initial message”, and **liberal structures**, characterized by “greater freedom of reproduction of reported words” (2009: 82). More interestingly, she has also identified a third type of what she has called **combined structures**, which are less frequent in her corpus than the other two but which present a mixed pattern, as in the following example:

Example 3

John Jackson of the Scottish Development Center for Mental Health insisted the unit would not pose significant risk to the community: “There hasn’t been one single case across the UK of a patient escaping from a medium-care unit and they function very safely”. (in Smirnova 2009: 82)

In order to gain deeper insight on how stance is used by journalists to construct ‘polyphonic arguments’ in popularizations, our focus has been placed on the analysis of this type of structure in particular. Our study focuses on the formal and functional relations between the evaluative space defined in the text preceding and introducing DS, and the DS itself because, as Smirnova posits, both syntax and semantics are “important for the reader’s persuasion and determine the role of reported speech in argumentative discourse” (2009: 88).

SPEECH (RE)PRESENTATION IN NEWSPAPER DISCOURSE

With the purpose of classifying the different ways how journalists have introduced other voices in the popularizations studied, our analysis relies on Semino and Short’s (2004) classification of speech (re)presentation, as summarised in Semino (2009: 448), which distinguishes the following main categories along the cline of available options:

Narrator’s representation of voice (NV)	→	<i>talks in Germany</i>
Narrator’s representation of speech acts (NRSA)	→	<i>as Mr Putin threatened retaliation</i>

Indirect speech (IS)	→	<i>the Foreign Office announced it was ceasing cooperation with Russia on a range of issues...</i>
Free indirect speech (FIS)	→	<i>The Bishop of Wakefield [...] said that [...] such practices were “utterly disgusting and blasphemous”. <u>They were not recognizable as part of any Anglican creed.</u></i>
Direct speech (DS)	→	<i>Foreign Secretary David Milliband told MPs: “The heinous crime of murder requires justice.”</i>

Table 1. Cline of speech (re)presentation categories (from Semino 2009)

According to Caldas-Coulthard (1994: 303-304) when writers of news use both DS and IS to report what others say, they do it to implicate reliability and legitimation of the information. However, this constant “recursiveness” referring back to what others said may make the real facts happening in the real world be blurred or distorted and what is transmitted in news may be as fictionalized as any work of fiction. She points out that in the case of direct reports, as we have mentioned before, the author is providing the text with features of reliability and faithfulness to the original speech event. In the case of indirect reports, however, the narrator is integrating the words of others into his or her own discourse, so he or she is in complete control of the words of others and there is “not even the pretence that the voice of the character is heard” (1994: 304). Nevertheless, it could be argued that in both DS and IS the narrator is always controlling the information he or she is including and faithfulness to the original words uttered can always be questioned.

This “factional” world which is created in news reports is therefore understood by Caldas-Coulthard as a meeting point for fact and fiction. Reporters are supposed to be reporting facts happening in the real world but the very act of reporting implies that the information presented may be distorted and appear ‘fictionalised’. And this is the case for both the use of DS and IS as devices for reproducing other people’s words. De Oliveira (2007) and de Oliveira and Pagano (2006) state that journalists make use of direct quotations for three main reasons. The first reason is that quotations present the quoted authors, in this case scientists, as superior to the writers who are popularizing them (2006: 644). The second reason is that, contrary to what happens with indirect speech, quotations limit the journalist’s possibilities of appropriating the voices of the sources they are quoting. On the third place, and this is where our study mainly revolves around, journalists make use of quotations because they create a discursive distance or a gap, which we have identified as a space for evaluation. However, De Oliveira and Pagano argue that, even if this space for evaluation is created, “it does not contribute to the subversion of social and cultural differences” (2006: 644), because there are some rhetorical conventions associated to the scientific genre which make it difficult for the journalist to appropriate that space for his or her own purpose. As they point out, there is some status ascribed to scientific knowledge so that journalists need to make it clear whose voice belongs to whom.

## STUDY AND METHOD

In order to carry out our study we compiled and analysed a corpus consisting of 66 random science popularization articles published between the years 2010 and 2012 in the electronic version

of the British broadsheet *The Guardian* ([www.guardian.co.uk](http://www.guardian.co.uk)). We carried out a quantitative and qualitative analysis. We first searched for all the occurrences of DS in the different articles of our corpus and then we analysed them in relation with their precedent text to isolate the occurrences of Smirnova's combined structures. Then we analysed and annotated the texts according to the type of speech (re)presentations they were, the explicit evaluative elements they contained in the part preceding the DS, and the type of reporting verb they presented to introduce the DS. As to the type of speech (re)presentations, only three of the four possible types were identified, namely NRSAs, ISs and FISs. It seems that, at least in the case of popularizations, the pattern NV + Q is not used.

The reporting verbs were classified according to their illocutionary force (or absence of it). We relied on Thompson's (1994) classification of reporting verbs, summarised below, and also considered *mindsay* verbs as well:

- Neutral reporting verbs
- Reporting verbs showing the speaker's purpose
- Reporting verbs showing the manner of speaking
- Reporting verbs showing what was said through the reporting verb
- Reporting verbs indicating how the message fits in
- Reporting verbs drawing attention to the speaker's or writer's words
- Reporting verbs showing your attitude towards what you report
- Reporting verbs showing that you do not accept responsibility
- Reporting verbs showing your attitude through reporting adjuncts
- Reporting verbs showing the effect of what is said
- Reporting verbs showing whether a report is of speech or of writing (verbs such as *chat* or *converse* vs. verbs such as *scribble* or *write down*)

Therefore, by identifying in the corpus all the cases of DS and then analysing the evaluative elements and the reporting verbs present in the precedent text identified as their evaluative space, we could classify two broad groups with four different patterns according to the features of the evaluative space, which we describe below.

## TYPES OF COMBINED STRUCTURES IN POPULARIZATION ARTICLES

### 1. QUOTATION WITHOUT PREVIOUS EVALUATION (Q)

According to de Oliveira (2007) and de Oliveira and Pagano (2006), quotations are "rhetorical resources" (de Oliveira and Pagano 2006: 629) which are used to reproduce in an exact way the words uttered by others. Thompson (1996) argues that they are the best option to reproduce a language event which presents a high degree of faithfulness to the words originally expressed and also that they provide the text with some features of reality and drama. In line with this view, Caldas-Coulthard (1994) also posits that they make the text more lively. At the same time, we consider that in these cases there is no distance negotiation between the journalist and the attributee or, in other words, that the preceding text introducing the DS has not been used as an evaluative space but only for stating who the attributee is and that some speech (or thought) is being introduced.

#### Example 4

A spokeswoman for the Department of Health said: “We are currently considering how to ensure the public gets the best advice on this issue, given that there are risks as well as potential benefits from taking aspirin” (TG\_05\_ENG).

### 2. PARTIAL QUOTATION (PQ)

Also called ‘embedded quotation’ by Semino and Short (2004), this type is described as a distinctive feature of news reporting which can be seen as “the result of attempting to achieve maximum effectiveness and vividness in the shortest space possible” (Semino 2009: 452). In popularizations we can distinguish two different types according to their communicative function:

1. Partial quotations used by journalists to ‘label’, as in

#### Example 5

Barker said the work was **“the oldest unequivocally dated rock art in Australia”** and among the oldest in the world (TG\_61\_ENG).

2. Partial quotations used to introduce scientific jargon, as in

#### Example 6

Henshilwood’s team said the tools were evidence for an **“ochre-processing workshop”** run by early humans, who gathered the colourful mineral oxides from sites about 20 miles away” (TG\_24\_ENG).

Being generally more discrete units than clauses or propositions, at least in the cases in our corpus, PQs are not necessarily preceded by an evaluative space, as in Example 5. In our view, although fitting in the formal category of DS, they do not function as a necessary element in the argumentative pattern SITUATION + EVALUATION but just as part of it, and hence in our view they do not have the potential to construct newspaper argument in themselves.

### 3. REPHRASING AS REFORMULATION (RR)

The journalist rephrases the words uttered by others and then he/she includes a quotation to support or illustrate the previous rephrasing. In this case, the unit of analysis we took into account was both the rephrasing done by the journalist, which includes a reporting verb, and also the quotation (reporting clause with reporting verb and reported clause with the words uttered by the original source of information). In these occurrences the evaluative space and the quotation present very clear lexical cohesion by reformulating the information, as in the example below. However, when evaluation is presented, it is often covertly made, e. g. by means of a reporting verb with illocutionary force. RRs tend to present a pattern where the DS functions as BASIS for the EVALUATION previously introduced, as in the example below.

#### Example 7

Experts said new diesel engines spew out fewer fumes but **further studies are needed** to assess **any potential dangers**. **“We don’t have enough evidence** to say these new engines are **zero risk**, but they are certainly lower risk than before,” said Vincent Cogliano of the US Environmental Protection Agency. (TG\_58\_ENG)

In this case, the journalist reproduces the words uttered by the external source of information but, as Caldas-Coulthard explains, “it is misleading to say that in DS the reporter is NOT in control. If the quotation is introduced by an illocutionary verb of saying *–claim, propose, suggest*, the reporter explicitly interferes with the report, while, if the quotation is introduced by a



neutral verb of saying –*say, tell* – the reporter abstains from explicitly interfering in the report” (Caldas-Coulthard 1992: 65, emphasis original). Therefore, the writer’s stance or the distance negotiated between writer and attributee is crucially signalled by means of the reporting verb used.

#### 4. REPHRASING AS INTENSIFICATION (RI)

The evaluative space contains some explicit evaluation of the information but this time there is not rephrasing.

##### Example 8

Many biologists fear that the infection, known as white-nose syndrome, could spread to Britain, with **devastating consequences**. “It is a real worry and we keep a very close eye out for any sign of the disease, but so far, happily, we have not seen a sign,” said Worledge, partnership officer for the UK Bat Conservation Trust. (TG\_31\_ENG)

In these cases, the evaluative words used by the journalist are not present in the quotation so that the question arising is whether it is the journalist who is responsible for them, or rather the attributee of the DS.

#### RESULTS AND DISCUSSION

In Table 1 we present the total number of occurrences of combined structures (Smirnova 2009) which appear in the science popularizations analysed. The table also shows the number of occurrences of the four functions of quotations identified.

	QUOTATIONS	PARTIAL QUOTATIONS	REPHRASING AS REFORMULATION	REPHRASING AS INTENSIFICATION	TOTAL NUMBER OF COMBINED STRUCTURES
NUMBER OF OCCURRENCES	184	79	45	21	<b>329</b>
%	55.92	24.01	<b>13.67</b>	<b>6.38</b>	100

Table 1. Types of combined structures (Smirnova 2009)

Most occurrences in the corpus are cases of DS where the preceding space has not been used for evaluative purposes, the journalist simply introducing the words uttered by others. This finding is consistent with Smirnova’s (2009). However, the interest of our results lies in the RR and RI cases where the evaluative space has a more salient function. 13.67 % of the occurrences are RR, where the evaluative space contains either a reporting verb with illocutionary force or what we have termed so far ‘ambiguous’ cases, as the example below, in which the highlighted information in the evaluative space cannot be univocally attributed to any of the three potential sources (Wallworth, the journalist, or if we just look at the immediately precedent person introduced in the narration, even David Hannan).

##### Example 9

Wallworth commissioned filming by underwater cinematographers, including the Emmy award-winning Australian David Hannan who shot around three-quarters of it. **The film is strange and beautiful to look at and will be even more incredible for viewers as it will be shown at planetariums across the world.**

“People will think they are in space, think they are moving through stars,” said Wallworth. (TG\_46\_ENG)

In Example 9, the structure immediately preceding the quotation does not fit clearly in any of the categories of Semino and Short’s classification, as it could be interpreted as IS but also as FIS. In our view, it is this ambiguity within the evaluative space which has the potential for constructing stance in an overt way, blurring the limits as to which voice is speaking. On the other hand, we find 6.38 % occurrences of RIs, where the evaluative space explicitly presents some kind of evaluation, either questionable or not, in the sense pointed out by Hoey (2000), and which could be either an EVALUATION to the SITUATION presented in the quotation, or an EVALUATION of the SITUATION presented in the very evaluative space, the quotation being the REASON or the BASIS for the Evaluation, as happened in Example 1. The presence of those cases labelled as ambiguous is of 35.5% of RRs and 33.3% of RIs, which suggests that it could function as a pattern in these combined structures.

As we stated before, we also analysed the different functions of the reporting verbs which appear in the science popularization articles introducing quotations and sometimes also the previous rephrasing done by journalists. In the graphics included below, we present the functions of reporting verbs according to Thompson’s (1994) classification as they are associated with the different functions of quotations previously identified.

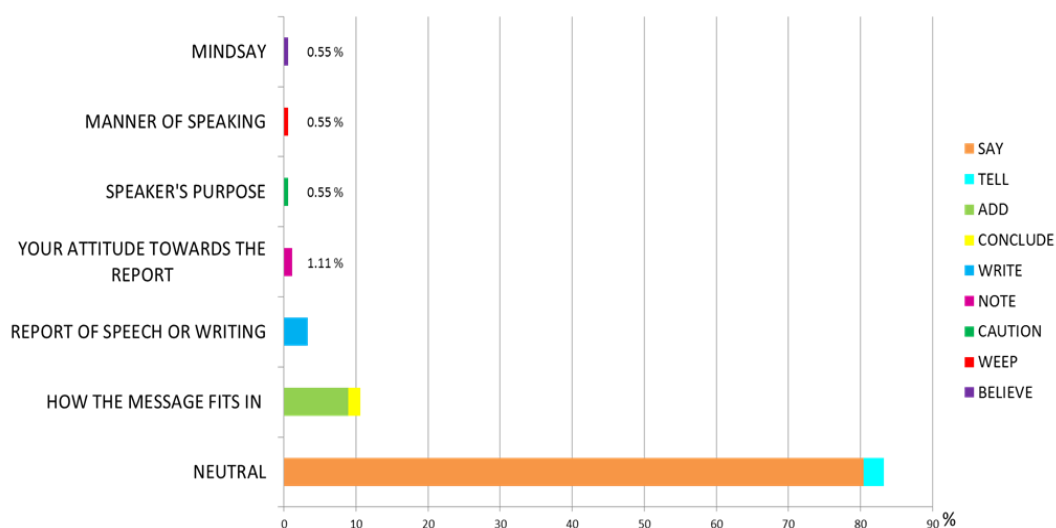


Figure 1. Functions of reporting verbs introducing Qs (reporting clauses)

If we have a close look at this graphic, it can be seen how the great percentage of cases (more than 80%) belong to the use of the **neutral** reporting verb *say*. There are also some other functions that the different reporting verbs present, but the percentages are not significant if we compare them with the one showed by *say*. With this verb, and according to Thompson (1994: 34-36), the journalist simply wants to signal that he/she is reporting what others said without including any further information about the speaker’s purpose or manner when uttering the words.

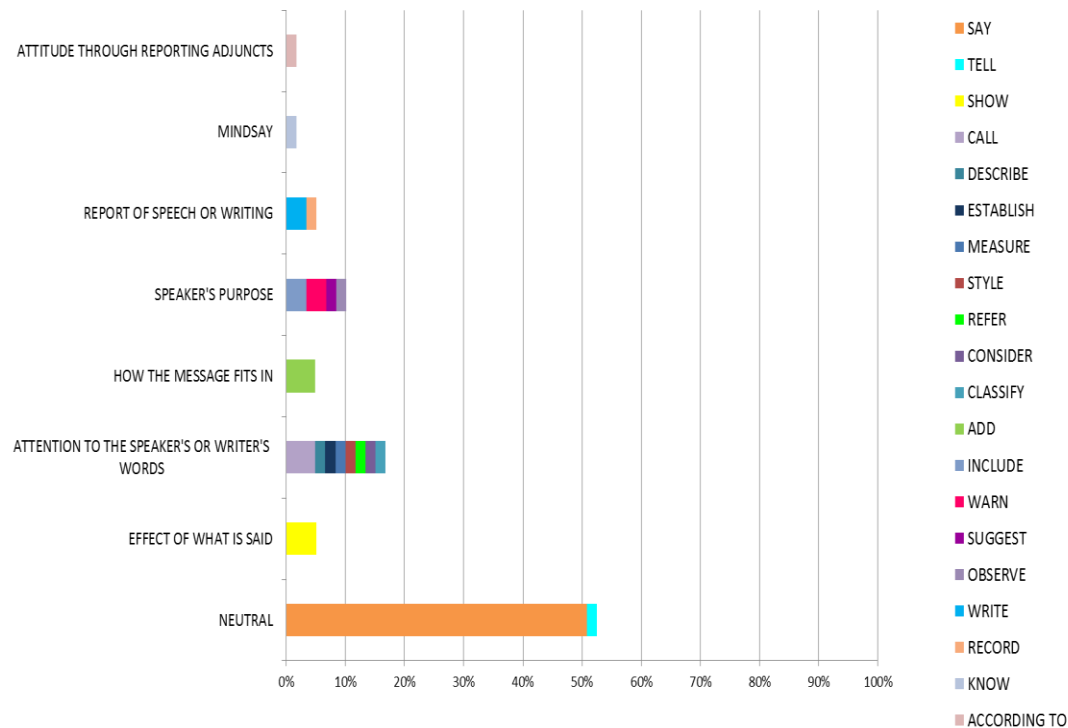


Figure 2. Functions of reporting verbs introducing PQs

In Figure 2 it is worth noting that again the majority of cases belong to the use of the neutral verb *say* (more than 50%). This is so because with partial quotations journalists either want to ‘name the world’ or they include some words belonging specifically to some area of science and which are difficult to explain (scientific jargon). If we compare the data in Figure 2 above with those in Figure 1, we can see how the variety of reporting verbs and their associated functions is greater than in the previous one. This seems to suggest that PQ are less stable than Q, which seems to present quite a simple pattern, which is consistent with Semino’s interpretation that embedded quotations can be “found in all forms of non-direct speech presentation apart from NV” (2009: 452).

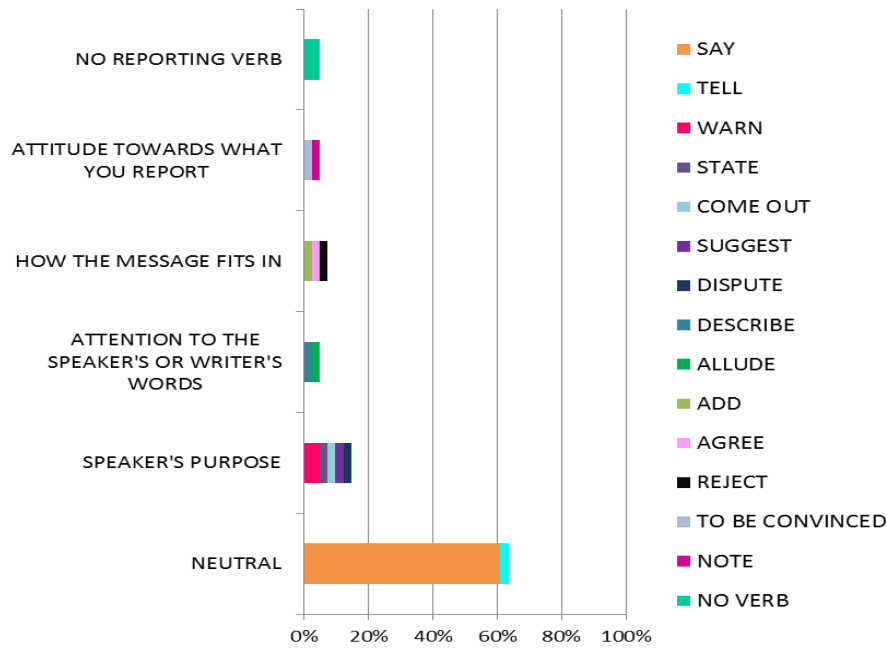


Figure 3a. Functions of reporting verbs in RR (evaluative space part)

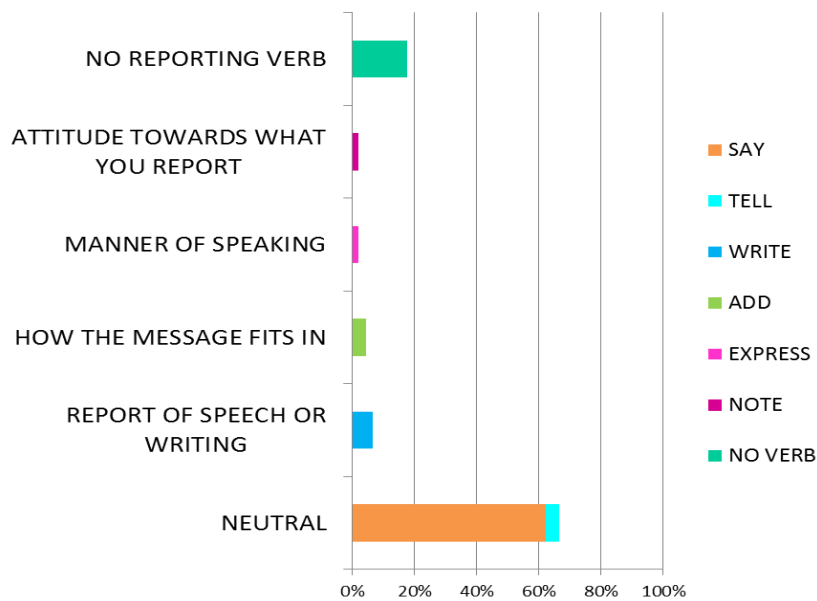


Figure 3b. Functions of reporting verbs in RRs (DS part)

In the rephrasing part, shown in Figure 3a, the most frequent verb is *say*, although it is interesting to note that there is an important percentage which belongs to the use of reporting verbs showing the speaker's purpose. Although with the use of these verbs what the writer shows is the purpose conveyed by the original utterer of the words, it is actually your interpretation of the purpose that you give (Thompson 1994: 36-38). In the majority of cases, the writer seems just to try to convey the information accurately, but there are some cases in which the original purpose of the speaker is quite different from the one conveyed in the reporting verb used by the journalist. With the use of these verbs, the presence of the journalist is much higher than in the previous cases analysed of Qs and PQs.

If we compare Figure 3a with Figure 3b, it can be seen how the majority of occurrences of reporting verbs belong to the neutral *say*. What is interesting to remark is that the different types of reporting verbs used in the quotation part is less varied than in the rephrasing. This could be explained by the fact that in the quotation part the journalist is being more neutral and his/her presence is less prominent than in the rephrasing part, where he/she uses his/her own words to transmit the information included in the quotation.

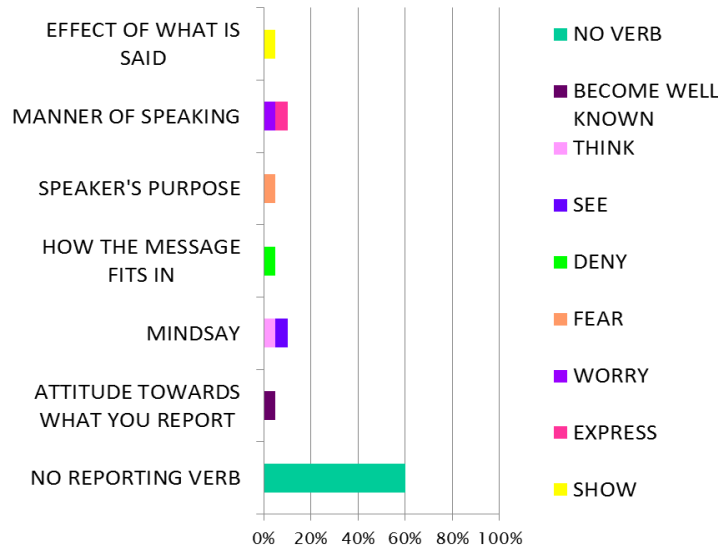


Figure 4a. Functions of reporting verbs in RIs (evaluative space part with explicit evaluation)

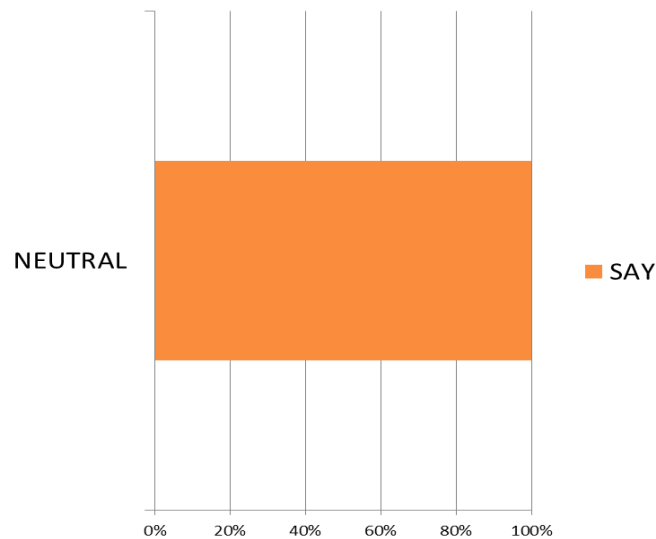


Figure 4b. Functions of reporting verbs in RIs (DS part)

Figures 4a and 4b belong to the unit of analysis conformed by a rephrasing done by the journalist with his or her own evaluation of the information included and then the quotation with the original words uttered. It is the function that we have identified as 'Intensification'. After having analysed each occurrence of this function, the results are shown above. The first figure corresponds to the rephrasing part with evaluation. It is worth mentioning that in the majority of cases this rephrasing carried out by the journalist presents no reporting verb (60% of cases analysed). This

lack of reporting verb might be due to the fact that the presence of the journalist is much higher and stronger than in the previous cases studied. He/she is including his/her own evaluation of the information and thus his/her voice is more prominent. This absence of reporting verb indicates that in a way, the journalist is not rephrasing any information given previously; it is as if what he/she is saying has not been said before anywhere else. It is also worth mentioning the absence of the neutral verb *say* as another indicator of the more prominent presence of the journalist.

Nevertheless, if we have a look at Figure 4b, which corresponds to the quotation part, it could be seen how the situation explained above changes. In this part, the journalist is including the actual words uttered by the original source of information, so he/she is making use of the neutral reporting verb *say* because it is not his/her own words the ones he/she is giving. The journalist does not want to convey any feelings or any evaluation and that is why in the reporting clause introducing the quotation he/she decides to use a neutral reporting verb. The journalist takes advantage of the 'evaluative space' created between his/her own voice and the voice of the experts, but in the quotation part he/she signals explicitly that he/she does not want to evaluate in any way the information presented.

## CONCLUSIONS

In this paper we have aimed at a better characterization of how journalists construct stance in science popularization articles in the British press. One of the most frequently used potential ways of achieving this involves the use of external sources to construct newspaper argument, allowing journalists to either present other people's stance towards the information presented but also their own. Within this polyphonic construction of argument, we have paid attention to those cases which constitute a transition from the journalist's voice to the introduction of other voices in his/her narration, thus concentrating in what Smirnova (2009) has called combined structures.

In the combined structures used by journalists in popularizations, the evaluative space preceding the introduction of a new voice can include evaluation which contributes to the development of the argument but, as we have seen, this evaluation can be presented not only as questionable by readers or explicitly overt, but also more covertly as taken for granted. Through our analysis we have also seen that in this evaluative space voices are blurred. The claim to be made is that if voices cannot be clearly identified, thus the evaluative space can be potentially used for introducing journalist's stance that can be covertly ascribed to an external voice. In this sense, we can conclude that in popularizations of the kind analysed in this study the construction of stance in relation to the introduction of external voices in the text is realized by two combined means. Firstly, journalists can introduce explicit evaluative elements in the evaluative space overtly but, more interestingly, they can also introduce covert evaluation, as taken for granted, either by means of evaluative adjectives or other stance markers in a 'non-questionable' syntactic position or by means of reporting verbs with illocutionary force. Secondly, stance is potentially constructed in the evaluative space by blurring the voices speaking in a fashion that the evaluation can be ascribed to the external voice but also to the journalist, so that the responsibility for what is said is kept unclear.

On the other hand, and beyond the initial purpose of our study, our analysis of the combined structures has also revealed that partial quotations do not seem to constitute necessary elements in the construction of argument, so their *raison d'être* could rather be related to options lexically connected with the popularization situation in relation to the newspaper readership, something which has not been the focus of this study but which clearly requires further attention.

Our analysis of how journalists construct meaning when giving voice to external sources of information may contribute to shed light on the kind of discursive evaluative devices which are employed by science journalists when trying to add informed opinion to their reports, at least in the context of the British broadsheet newspapers analysed. However, further research needs to be done

in this topic, especially by analysing this same phenomenon in a bigger sample of popularization articles in the British press in order to be able to find out more about those cases which in the present study have been classified as ambiguous, especially (but not only) those cases of free indirect speech where the boundaries between the different voices present (the journalist's voice and the external voice) are blurred in the rephrasing or "liberal part". Finally, this analysis can also be applied to contrastive studies of science popularization articles in the British and other languages in an attempt to better characterize how stance is constructed within the evaluative space across cultures.

#### WORKS CITED

- BEAUGRANDE, R. DE. 1991. *LINGUISTIC THEORY: THE DISCOURSE OF FUNDAMENTAL WORKS*. RETRIEVED FROM <[HTTP://BEAUGRANDE.COM](http://beaugrande.com)>.
- BEDNAREK, M. 2006. *EVALUATION IN MEDIA DISCOURSE*. LONDON: CONTINUUM.
- BIBER, D. 2004. "HISTORICAL PATTERNS FOR THE GRAMMATICAL MARKING OF STANCE: A CROSS-REGISTER COMPARISON." *JOURNAL OF HISTORICAL PRAGMATICS* 5(1): 107-136.
- BIBER, D. 2006. "STANCE IN SPOKEN AND WRITTEN UNIVERSITY REGISTERS." *JOURNAL OF ENGLISH FOR ACADEMIC PURPOSES* 5: 97-116.
- BONDI, M. AND MAURANEN, A. 2003. "EDITORIAL: EVALUATIVE LANGUAGE USE IN ACADEMIC DISCOURSE." *JOURNAL OF ENGLISH FOR ACADEMIC PURPOSES* 2: 269-271.
- CALDAS-COULTHARD, C.R. 1992. "THE REPRESENTATION OF SPEECH IN FACTUAL AND FICTIONAL NARRATIVE: STYLISTIC IMPLICATIONS." *OCCASIONAL PAPERS IN SYSTEMIC LINGUISTICS* 6: 61-70
- CALDAS-COULTHARD, C.R. 1994. "ON REPORTING REPORTING: THE REPRESENTATION OF SPEECH IN FACTUAL AND FICTIONAL NARRATIVES." IN COULTHARD, M. (ED.) *ADVANCES IN WRITTEN TEXT ANALYSIS*. LONDON: ROUTLEDGE. 295-308.
- CALSAMIGLIA, H. AND LÓPEZ FERRERO, C. 2003. "ROLE AND POSITION IN SCIENTIFIC VOICES: REPORTED SPEECH IN THE MEDIA." *DISCOURSE STUDIES* 5(2): 147-173.
- CONRAD, S. AND BIBER, D. 2000. "ADVERBIAL MARKING OF STANCE IN SPEECH AND WRITING." IN HUNSTON, S. AND THOMPSON, G. (EDS.) *EVALUATION IN TEXT: AUTHORIAL STANCE AND THE CONSTRUCTION OF DISCOURSE*. OXFORD: OXFORD UNIVERSITY PRESS. 56-73.
- DUCROT, O. 1986. *EL DECIR Y LO DICHO: POLIFONÍA DE LA ENUNCIACIÓN*. BARCELONA: PAIDÓS.
- ELORZA, I. 2011. "THE ENCODING OF AUTHORIAL VOICE IN SCIENCE POPULARIZATIONS IN THE PRESS: A CORPUS-BASED CROSS-CULTURAL TEXT ANALYSIS." PAPER PRESENTED AT THE 12<sup>TH</sup> INTERNATIONAL PRAGMATICS CONFERENCE. MANCHESTER, 3-8 JULY 2011.
- HALLIDAY, M.A.K. 1985. *AN INTRODUCTION TO FUNCTIONAL GRAMMAR*. LONDON: EDWARD ARNOLD.
- HALLIDAY, M.A.K. 1994. *INTRODUCTION TO FUNCTIONAL GRAMMAR*. LONDON: EDWARD ARNOLD.

HALLIDAY, M.A.K. AND MATTHIENSEN, C.M.I.M. 2004. *AN INTRODUCTION TO FUNCTIONAL GRAMMAR* (3<sup>RD</sup> REVISED EDITION). LONDON: EDWARD ARNOLD.

HOEY, M. 2000. "PERSUASIVE RHETORIC IN LINGUISTICS: A STYLISTIC STUDY OF SOME FEATURES OF THE LANGUAGE OF NOAM CHOMSKY." IN HUNSTON, S. AND THOMPSON, G. (EDS.) *EVALUATION IN TEXT: AUTHORIAL STANCE AND THE CONSTRUCTION OF DISCOURSE*. OXFORD: OXFORD UNIVERSITY PRESS. 28-37.

HUNSTON, S. 2000. "EVALUATION AND THE PLANES OF DISCOURSE: STATUS AND VALUE IN PERSUASIVE TEXTS." IN HUNSTON, S. AND THOMPSON, G. (EDS.) *EVALUATION IN TEXT: AUTHORIAL STANCE AND THE CONSTRUCTION OF DISCOURSE*. OXFORD: OXFORD UNIVERSITY PRESS. 176-207.

HUNSTON, S. AND SINCLAIR, J. MCH. 2000. "A LOCAL GRAMMAR OF EVALUATION." IN HUNSTON, S. AND THOMPSON, G. (EDS.) *EVALUATION IN TEXT: AUTHORIAL STANCE AND THE CONSTRUCTION OF DISCOURSE*. OXFORD: OXFORD UNIVERSITY PRESS. 74-101.

HUNSTON, S. AND THOMPSON, G. (EDS.) 2000. *EVALUATION IN TEXT: AUTHORIAL STANCE AND THE CONSTRUCTION OF DISCOURSE*. OXFORD: OXFORD UNIVERSITY PRESS.

HYLAND, K. 2005. "STANCE AND ENGAGEMENT: A MODEL OF INTERACTION IN ACADEMIC DISCOURSE." *DISCOURSE STUDIES* 7(2): 173-192.

HYLAND, K. 2010. "CONSTRUCTING PROXIMITY: RELATING TO READERS IN POPULAR AND PROFESSIONAL SCIENCE." *JOURNAL OF ENGLISH FOR ACADEMIC PURPOSES* 9: 116-127.

KIM, C.K. AND THOMPSON, G. 2010. "OBLIGATION AND READER INVOLVEMENT IN ENGLISH AND KOREAN SCIENCE POPULARIZATIONS: A CORPUS-BASED CROSS-CULTURAL TEXT ANALYSIS." *TEXT & TALK* 30(1): 53-73.

LEECH, G. AND SHORT, M. 1981. *STYLE IN FICTION*. LONDON: LONGMAN.

MARTIN, J.R. 2000. "BEYOND EXCHANGE: APPRAISAL SYSTEMS IN ENGLISH." IN HUNSTON, S. AND THOMPSON, G. (EDS.) *EVALUATION IN TEXT: AUTHORIAL STANCE AND THE CONSTRUCTION OF DISCOURSE*. OXFORD: OXFORD UNIVERSITY PRESS. 142-175.

MARTIN, J.R. AND WHITE, P.R.R. 2005. *THE LANGUAGE OF EVALUATION: APPRAISAL IN ENGLISH*. BASINGSTOKE: PALGRAVE.

MOIRAND, S. 1997. "FORMES DISCURSIVES DE LA DIFFUSION DES SAVOIRS DANS LES MÉDIAS." *HERMÈS* 21: 33-44.

DE OLIVEIRA, J.M. 2007. "LAS VOCES DE LA CIENCIA: LA REPRESENTACIÓN DEL DISCURSO EN TEXTOS DE DIVULGACIÓN CIENTÍFICA Y EN ARTÍCULOS DE INVESTIGACIÓN." *UNIVERSITAS TARRACONENSIS: REVISTA DE CIÈNCIES DE L'EDUCACIÓ* 2: 77-93. ISSN: 0211-3368.

DE OLIVEIRA, J.M. AND PAGANO, A.S. 2006. "THE RESEARCH ARTICLE AND THE SCIENCE POPULARIZATION ARTICLE: A PROBABILISTIC FUNCTIONAL GRAMMAR PERSPECTIVE ON DIRECT DISCOURSE REPRESENTATION." *DISCOURSE STUDIES* 8(5): 627-646.

SANDERS, J. 2010. "INTERTWINED VOICES: JOURNALISTS' MODES OF REPRESENTING SOURCE INFORMATION IN JOURNALISTIC SUBGENRES." *ENGLISH TEXT CONSTRUCTION* 3(2): 226-249.



SEMINO, E. 2009. "LANGUAGE IN NEWSPAPERS." IN CULPEPER, J.; KATAMBA, F.; KERSWILL, P.; WODAK, R. AND MCENERY, T. (EDS.) *ENGLISH LANGUAGE: DESCRIPTION, VARIATION AND CONTEXT*. HOUNDMILLS, BASINGSTOKE: PALGRAVE MCMILLAN. 439-453.

SEMINO, E.; SHORT, M. AND CULPEPER, J. 1997. "USING A CORPUS TO TEST A MODEL OF SPEECH AND THOUGHT PRESENTATION." *POETICS* 25: 17-43.

SEMINO, E. AND SHORT, M. 2004. *CORPUS STYLISTICS: SPEECH, WRITING AND THOUGHT PRESENTATION IN A CORPUS OF ENGLISH WRITING*. LONDON: ROUTLEDGE.

SILVER, M. 2003. "THE STANCE OF STANCE: A CRITICAL LOOK AT WAYS STANCE IS EXPRESSED AND MODELED IN ACADEMIC DISCOURSE." *JOURNAL OF ENGLISH FOR ACADEMIC PURPOSES* 2: 359-374.

SMIRNOVA, A. V. 2009. "REPORTED SPEECH AS AN ELEMENT OF ARGUMENTATIVE NEWSPAPER DISCOURSE." *DISCOURSE & COMMUNICATION* 3: 79-103.

THOMPSON, G. 1994. *COLLINS COBUILD ENGLISH GUIDES 5: REPORTING*. LONDON: HARPERCOLLINS PUBLISHERS.

THOMPSON, G. 1996. "VOICES IN THE TEXT: DISCOURSE PERSPECTIVES ON LANGUAGE REPORTS." *APPLIED LINGUISTICS* 17(4): 501-530.

THOMPSON, G. 2004. *INTRODUCING FUNCTIONAL GRAMMAR (2<sup>ND</sup> EDITION)*. LONDON: EDWARD ARNOLD.

THOMPSON, G. AND YE, Y. 1991. "EVALUATION IN THE REPORTING VERBS USED IN ACADEMIC PAPERS." *APPLIED LINGUISTICS* 12(4): 365-382.