

ACCOUNTABILITY PRACTICES IN RESEARCH AND PUBLICATION ETHICS ON THE WEB

Linguistic and discursive features

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Abstract – With the large increase in the amount of published research being carried out throughout the world, potential is mounting for ethical practices to take a back seat in the apparent frequency of reported cases of scientific misconduct. While these cases erode the credibility of scientific research and public trust in the publication process, they often delineate accountabilities between conflicting parties and require organisational and institutional responses to good research practices based on fundamental, ethical principles of research integrity. In this paper, I explore the linguistic and discursive features of research and publication ethics in a representative corpus of misconduct cases as a genre created and maintained by the Committee on Publication Ethics (COPE) organisation over its website. Using a combined framework of methodological perspectives from functionally-defined criteria of discourse and genre categorizations (Askehave, Swales 2001; Bhatia 2004; Swales 2004) alongside evaluation (Hunston, Thompson 2000) and stance-taking (Biber *et al.* 1999; Hyland 2005), this study looks at the discourse organisational structure of texts with identifiable communicative moves and associated language use to unveil the types of social actors' relations and identities constructed through "Action", "Representation" and "Identification" (Fairclough 2003) of the social events and practices in question via *recontextualization* and *interdiscursivity* (Bhatia 2004, 2017; Fairclough 2003; Sarangi, Brookers-Howell 2006). Linguistic and rhetorical choices made on recontextualized and representational features of text reveal how cases set the tone for accountability between the social actors (parties) involved in matters of research ethics, and how they allow the organisation to take responsibility for the integrity of their research conduct by fostering a climate of responsible practices and adjusting party accountabilities. Attending to both linguistic and discursive features, the communicative practices of the case genre authenticate the competing social relations, identities, values or interests of the parties in this kind of discourse representation, and align the institutional action, identity and values of the organisation with social norms when legitimising its commitment to create and preserve conditions for ethical principles and professional standards essential for a range of responsible practices of research publishing.

Keywords: discourse and genre; accountability; ethics; research integrity.

1. Introduction

As science evolves and violations of scientific research are ramping up across the board, ethics is increasingly being nudged out of the different stages of

the research protocol with a myriad of misconduct cases covering authorship criteria failure, falsification, fabrication, or other issues, recorded by ethics-related professional organisations over their websites and documented in meta-analytical surveys across the disciplines (DuBois *et al.* 2013; Fanelli 2009; Fanelli *et al.* 2019; Steneck 2006). Not only do these cases reveal that the overall integrity of scientific research practices and ethical principles are fundamentally flawed in the relevant scientific community and that the *trust* (Luhmann 1979) between researchers themselves and the larger society is ultimately lost, they also become central to most accounts of *professionalism*, described as a *normative value system* or *ideology* (Evetts 2011).

In this connection, the debate over what constitutes scientific integrity and misconduct has led to different definitional approaches to ethical lapses in research. One influential, ethicist approach has focused on *responsible conduct of research* as a cover term for *research ethics*, meaning “research behaviour viewed from the perspective of moral principles”, such as those “associated with or that arise in the course of pursuing research”, and *research integrity*, meaning “research behaviour viewed from the perspective of professional standards”, such as those of “professional organisations” or “research institutions” (Steneck 2006, p. 56, original italics). The rationale for this approach is that research conduct occurs on a spectrum, from excellent research conduct at one end to research misconduct at the other, with falsification, fabrication and plagiarism being the most serious forms of scientific misconduct that damage the integrity of the research process (Fanelli 2009; Steneck 2006).

Regardless of how detrimental these research practices may be described in the cited literature, the way ethical principles unite with moral and professional standards in social environments of research publishing implies that there are other frameworks within which several different stakeholders across the publishing industry (for instance, author, editors and research institutions) interact with each other and make choices. These interaction frameworks bring into focus the concept of accountability for scientific misconduct, meaning that “[m]oral responsibility assumes a capacity for making rational decisions, which in turn justifies holding moral agents accountable for their actions” (Barrett 2004) and worthy of *blame* (Hieronymi 2004), as a result of their *role-given responsibilities* (Barrett 2004). Joined to a moral and functional logic of responsibility and role, accountability thus describes a person or group who can make reliable and responsible decisions, or can take ownership of one’s actions and blame if decisions are not made properly. For our purposes here, accountability makes it appropriate for individual stakeholders to be directly responsible as well as accountable for the consequences of blameworthy actions, decisions, or judgments made by themselves in the relational and interpersonal process of

scientific communication, and becomes a key form of social practice by which interaction is achieved. Under these terms, the concept bears on the essential standards of professional integrity and fiduciary trust within the research community and society at large.

Indeed, “risk always involves the question of responsibility” (Beck 2000, p. 8) in social life just as “risk is always discursively and dialogically constructed” across diverse professional fields (Sarangi, Candlin 2003, p. 119). In this perspective, accountability also makes it possible to identify how professional organisations think their way through the complex cases of scientific misconduct and provide an ethically defensible answer to the consequences of risky conduct that damages research. Not only do many such organisations now exist in plain sight to have quite a bit to say about what is expected of individual stakeholders, they also issue formal research integrity codes and guidelines that set moral standards and functional responsibilities for risky conduct among stakeholders, thus guiding professionally ethical behaviour and preventing scientific misconduct.

Against this background, this study sets out to look for the possible ways in which professional organisations address accountability in research ethics by systematically working to promote responsible conduct in research, strengthening research integrity and reducing the risk of research misconduct. It does so by exploring the linguistic and discursive features of web-sourced research and publication ethics cases acting as text, medium and genre and influencing both form and purpose. The choice for this digital genre makes it possible to see how writers (organisations’ insiders) draw attention to issues of alleged scientific misconduct by the parties concerned (authors and editors) and bring together the functionally and morally responsible behaviour entrenched within the principles and practices of ethical accountability in research agendas and grounded in the professional goals of the organisation. To this end, this paper is guided by three complementary research questions:

- RQ1: How do writers communicate socially situated activities of ethically challenging scientific misconduct performed with the case genre and developed from the interaction of rhetorical move structure, communicative purpose, and lexico-grammatical features?
- RQ2: How does the use of move-level linguistic features reveal perceptions, values, or interests of the participants (parties and organisation) in social actions and events?
- RQ3: How does this use bear on the social participants’ relationships, roles, and identities by determining what counts as accountability in scientific research principles and practices?

To answer these questions in both descriptive and interpretative terms, I shall first indicate the empirical material and research method used before I undertake the analysis and discussion of the findings for those questions and draw some preliminary conclusions.

2. Material and method

2.1. Corpus data

The empirical data source for this study came from a relatively small-sized, randomized corpus of 30 online cases of scientific misconduct sanctioned by the Committee on Publication Ethics (COPE) institutional website and collected from the COPE database over a four-year period (2015-2018).¹ COPE stands out as the largest ethics-related organisation in the world and is run by scholars and members of the scholarly publishing industry who are drawn to their work by a commitment to ethical scholarly practice (personal communication).² Topics for case publication ethics in the samples covered *authorship, conflicts of interest, consent for publication, copyright, correction of the literature, data, misconduct/questionable behaviour, peer review, and plagiarism*, thus cutting across all subjects of ethically challenging scientific wrongdoing claimed by individual researchers and institutions. The overall data source for this study was a 22,946 word corpus of published cases (Table 1).

Total tokens	Total sentences	Total mean (in words)	Mean length per text
22,946	930	24.42	764.87

Table 1

Quantitative data of case publication ethics collected from COPE Case Taxonomy (Topics) through Word Smith Tools 6.0 (Scott 2015).

2.2. Analytical data

To address the two research questions in both quantitative and qualitative terms, this study sought first to contextualize misconduct cases in terms of their activity and function, and then to identify the overall rhetorical structure of the digital genre acting as a medium and a text (Yates, Orlikowski 1992). In the latter mode, the study relied on the functionally-defined criteria of

¹ <https://publicationethics.org/guidance/Case> (downloaded on 31 May 2018).

² The 'About COPE' website page describes where the organisation aspires to be upon achieving its mission (<https://publicationethics.org/about/our-organisation>; last accessed in January 2020).

discourse and genre categorizations (Askehave, Swales 2001; Bhatia 2004; Swales 1990, 2004) to examine a sequence of textually relevant move patterns with communicative purposes, with each functional move being seen as “a discursal or rhetorical unit that performs a coherent communicative function” (Swales 2004, p. 228; and similarly Biber *et al.* 2007, p. 23), or as a “socio-cognitive pattern [of] a professional community” (Bhatia 2004, p. 9). Linguistic analysis of communicative moves kept track of their patterns for evaluative meanings expressed under the headings of *evaluation* (Hunston, Thompson 2000) and *stance* markers of *hedges*, *boosters*, *attitude markers*, and *self-mention* (Hyland 2005), as well as other linguistic approaches to narrative (Toolan 2001) and systemic perspectives on language use (Halliday, Matthiessen 2004).

Standing alongside this “explanatory, holistic approach” (Garzone, Santulli 2004, p. 352) to the qualitative, evaluative stance meaning analysis of discourse is the recognition that cases favoured the distribution of information between writer’s account and attributed source via indirect reporting (Fairclough 2003). Indirect reporting (summarization) subsumes much of the rhetorical process of *recontextualization* (Fairclough 2003; Sarangi, Brookers-Howell 2006), which relates to “how prior talk, text and context are reproduced and transformed in dynamic, dialogic fashion with consequences of meaning making” (Sarangi, Brookers-Howell 2006, p. 6), and brings to the fore the concept of *interdiscursivity* that covers the broader kind of *voice appropriation* (Bhatia 2004, 2017; Fairclough 2003) from different discourses and genres. In order to address the nature of accountability in the corpus data, analysis of the major linguistic and discursive features referenced by the communicative moves equally considered the effects of their textual elements of social relations, identities and roles on social events and practices between participating social actors (Fairclough 2003, pp. 8-11) as they were relevant to articulate “three major types of text meaning: action, representation, and identification” (Fairclough 2003, pp. 26-28).

3. Results and discussion

3.1. *Foot in the door: Contextualising cases for their activity and function*

Prior to analysing the genre’s rhetorical structure enacted within a medium and communicative purpose, it is useful to put the sampled texts in the general context of their activity and function. Sampled cases are representations of scenarios based on real-life situations and problem solving, which illustrate issues of research or publication ethics brought specifically

by authors, journal editors and other institutions (parties) to the COPE Forum (hereinafter referred to as ‘the organisation’) and discussed at the Forum meetings in London (personal communication). Prepared by the organisation’s professional ‘insiders’ (personal communication) and stripped of the party identifying details for data protection, cases essentially inform how any particular complaint raised by the parties breached ethical standards and integrity of the scientific record before seeing how the organisation advised on, and resolved the issue for the conflicted parties during those discussions.³

By providing a public information trace of discussions on scientific misconduct over the Web, cases essentially come through as the writer’s “frontstage” work done “backstage” (Goffman 1959) by the organisation, offering a way to understand social interactions, events and local practices shaped by the time and place in which they occurred alongside the participating social actors (parties, organisation). Just as this writing process allows for the representation of social actors, events and situations to be seen as part of the recontextualizing rhetorical strategies, that is, incorporating an earlier event within the context of a new one through selectively appropriate strategies, as further elaborated below, so too it suggests that cases rely on a mixture of ‘narrating’, ‘describing’, ‘arguing’, and ‘reporting’ rhetorical functions, otherwise called *generic values* (Bhatia 2004) or *discourse modes* (Bax 2011), appearing simultaneously across different types of text at both the genre and sub-genre level.

In practice, these ways of recontextualizing social events that took place back stage carry over to the front stage organisational and rhetorical structure of cases writers had in mind. As a result, they establish the social function of the genre created primarily for informative, advisory as well as resolute purposes for the parties to the conflicted case – researchers, journal editors, publishers and other individuals. Yet, we may well expect that case writers do more to cover everything from case information to advice and resolution angles, and aim to influence member editors and publishers through education and support for ethical practices in institutionalised contexts, alongside the promotion of professional debate in the wider community, as laid out by the organisation’s remit over the web site (‘About COPE’ webpage). Under these terms, the functionality of the genre is one which brings out the complexity of several possible layers of communicative purposes as advanced in most prominent text and genre analytical perspectives (Askehave, Swales 2001; Bhatia 2004).

³ This rationale of case writing lays out quite clearly that the organisation has no enforcement authority since it leaves the final decision on taking legal action in the case up to the individual.

3.2. Overall generic structure

As shown in Table 2 (Annexes), a key feature of cases is that they are conventionally structured in section headings as predetermined by the writer's requirements for explicit format and usage situations over the COPE website. Clearly, not all of these sections can be defined as communicative moves since TITLE, CASE NUMBER, YEAR and CLASSIFICATION appear outside text-based entries, with TITLE always being set as a link back to the case itself as are YEAR and CLASSIFICATION sections realized in the medium mode by the functional value of hyperlinks.⁴ However, these medium-based section headings become part and parcel of the overall standardized structure of the genre, and add to the backbone of text-based entries appearing across the sequence of communicative Moves 1, 2, 3, 4, and 5 (Table 2) as necessary to provide instant recounts of the organisation's earlier discussions on scientific misconduct – those which rely on a broader view of the representation of social events via recontextualization and the ways these events are narrated, described, reported, and evaluated.

This way then, the multimodal generic structure reveals that writers are mindful of a highly conventionalized and running schema for text production and web medium exploitation in which to organize information, advice and orient the wider audience to the process of case resolution. Besides accommodating the multimodal, non-linear characteristic of the digital genre, writers stage the development of their purposes through a series of moves or rhetorically distinct sub-moves, such as those in Move 1 (Table 2). As a result of this, the overall structural description of the digital genre can be seen as “a typified rhetorical action in the context of socially defined recurrent situations” (Yates, Orlikowski 1992, p. 301) or, like any other offline genres, as an institutionalized, rhetorical behaviour of *generic integrity* (Bhatia 2004), showing how COPE professional writers conceptualise their own communicative activities and purposes and write about ethically challenging issues in research and publication.

3.3. Stance-marking devices

As part of this generic structure, the use of stance-making devices is easily detectable in textually relevant communicative moves. Table 3 in Annexes shows the frequency counts of different lexical features for evaluative stancetaking through hedges (e.g. *can/may/might/would*, *believe/suggest*, *likely/possible*, *assumption/possibility*), boosters (e.g. *certain/impossible/true*,

⁴ YEAR and CLASSIFICATION sections, in particular, are used to provide a valuable resource for editors/journals and those researching publication ethics to build into a comprehensive library of organisation's policies and practices.

clearly, evidence, will-not), attitude markers (e.g. *should, agree/consent, desirable/important/necessary, importantly/remarkably*), and exclusive self-mentions (*I, we*), with the higher proportion of hedging lexical devices in each move also adding to a distinct set of structural elements of conditionals, as “means of expressing doubt [and] tentativeness” (Hyland 1994, p. 245, 1998).

Along with these different sets of linguistic devices, stance meanings were also treated as a grammatical phenomenon, and Table 3 reveals that these lexical features often collocate with *that*-clauses and *to*-infinitival clauses (Biber *et al.* 1999, pp. 671-674, 716-721), and particularly in the form of “anticipatory” or “extraposed” *it* (Kanoksilapatham 2005) with *that* complement clauses controlled by predicative likelihood adjectives (e.g. *It is unlikely that*), or factual/certainty adjectives performing stance functions (e.g. *It is indisputable that*), or with *to* complement clauses controlled similarly by stance attitudinal adjectives (e.g. *It is unreasonable to*).

However, reporting statements with *that*-clauses also involved the identification of a human/non-human source of written material, so that complement clauses are also usually controlled by cognition verbs (e.g. *The author believed that*), by an epistemic modal verb (e.g. *The Forum advised that*), or by an attitudinal verb for stancetaking (e.g. *The Forum agreed that*), as will become increasingly clear throughout this analysis.

3.4. Operationalizing communicative moves for their linguistic and discursive realizations

Taking these structural and linguistic features into consideration, we will now look into how the content of communicative moves qualitatively works out in this kind of discourse. We will therefore try to understand the relationships between ‘what’s going on’ for participants in the discourse situation and the actions available for them to enact these ‘goings on’.

3.4.1. Move 1 – Presenting the case scenario

After *introducing the case topic that is to follow by title* (an important lead-in rhetorical device to entice the reader’s interest, setting a tone and creating an expectation) and *identifying the case by serial numbering and dating system*, writers funnelled it down through *presenting the case scenario* (CASE TEXT). In this move, a quick memo of the case circumstance and ‘how it all came about’ is presented with a set of core facts for the case, informing about the contestable nature of ethical issues that suitably ‘sanitized’ parties faced when they turned to the organisation on issues of complaint, doubt or conflict for poor (unethically-compliant) research or publication practices. The extract below, dealing with ‘authorship in clinical research’, may provide a taste of

how the writer is sketching out the case ‘backwards’:

- (1) In 2015, a prospective author contacted the editorial office of a medical journal to request that an intended submission was not reviewed or consulted on by experts [...]. The author then named some of these experts, which included members of the journal’s editorial board (including editor A). The author claimed that these experts [...] After submission of the paper the author emailed the editorial office [...].

More precisely, the example shows the major objective of the move to provide a narrative report of events similar to a narrative (i.e. ‘storytelling’), defined as a “recounting of things spatiotemporally distant” (Toolan 2001, p. 1), and consisting of “the (re)presentation of character speech or thought” (Toolan 2001, p. 133) more broadly. By means of frequently occurring past tense active forms and time adverbials (Biber, Conrad 2009, p. 119) usually set off from “indirect reporting” (Fairclough 2003, p. 49), as shown above, the writer is able to ‘re-tell from behind’ the broader background of the observable story and real events unfolding in a sequence, and to represent time and actions of the main social actors as participants (author and editorial experts as parties) involved in critical events.

Since information is being provided about case events recounted as objectively as possible through indirect reports of statements, reliance on the reporting verbs and reported (*projected*) clauses (Halliday, Matthiessen 2004) above to give a “gist of what was said” in the “hypotactic representation of a verbal event” (Halliday, Matthiessen 2004, p. 454) becomes relevant for the ways the participant-author is now (re-)positioned in the discursive events. The effect is that the writer as a ‘reporter’ is also bringing his or her representation to actively bear on the participant-author’s evaluation or stance towards the social events ‘told’. This rhetorical process, then, is one which transforms the indirect evaluation of contentious social events through what might be called ‘twofold stances’ that the writer takes up towards another social voice he or she represents discursively while still retaining some degree of objectivity. This implies that selective strategies of “recontextualization – the appropriation of elements of one social practice within another” (Fairclough 2003, p. 32) - are also there to elucidate on the insights to be gained from this indirect, transformative perspective created by the summarization and paraphrase-like style of reporting.

Consistent with the varied stance features occurring within this move (Table 3), evidence of the participant-author’s stance towards the (writer’s) reported information is prompted in the same case example above by the use of linguistic elements. These are brought into the text by hedging (epistemic) modals, epistemic/cognition verbs or adverbs (*he believed that the experts who contributed to the guidelines would likely to be very negative and*

possibly biased' / *The author claimed that these experts ... may have a conflict of interest*), and an attitude verb (*The author explained that his paper disagrees with the published guidelines ...*), along with a stance (non-hedging) negation operator 'not' to mark an opposing, critical viewpoint (... *was not reviewed or consulted ...*). Together these elements highlight how this attributed stance resonates indirectly with different kinds of assumptions, ideas or attitudes held by the participant in the discursive events, and how it might contribute to the reader's reaction about the story 'told'.

On the other hand, the remaining discourse fragments from the same case example above give the writer something more to aim at, as we observe the social voice and personal ethos of the participant-author now being cited verbatim through his original talk, or "direct reporting" (Fairclough 2003, p. 49):

- (2) After submission of the paper the author emailed the editorial office with the comments: "I am sure that [the journal] will make sure that this manuscript is treated judiciously and justly. [...]. However, if significant errors remain in this regard and if as a result an important debate and patient safety take a backseat then I will probably need to make a formal complaint to [the journal] against the paper by [editor A] in the interest of patient safety. [...]"

With such subjectively marked statements progressively operating in the (direct) discursive representation of facts, it becomes clear that a greater focus is now brought on the feelings, opinions and goals of the participant social actor, so that the writer is able to verbalise the most explicit means of conveying the participant's own evaluative position or stance towards facts. This stance is evidenced by the grammatical marker of certainty (*I am sure that*) originating from a first person pronoun (*I*), and is clustered round the lexical category of a negatively evaluated noun (*errors*) for connoting a systematic deviation from the norm, or a negatively evaluated phrase (*take a backseat*) for expressing a non-participatory role on the issue. These stance features variously add to a hedging modal and adverbial forms (*could possibly potentially*), and adverbial or adjectival forms of attitudinal meanings (*judiciously, justly, important debate*), or a conditional for lack of knowledge about factual world (*if*). As a result of the participant now appearing in the original, 'seated position' rather than being perspectivised through the writer's indirect reporting, these stance markers are important to better adjust the point of view and attitude of the participant attached to his statements and elicit an evaluative response from the reader.

Allied with these modes of direct and indirect reporting often alternating within the narrative format is the writer's tendency to graft the stories on a set of interconnected discourses via *intertextuality* (Fairclough 2003). Again, in the example above, intertextuality features come through by

way of “quotation marks” or indirect speech (Bhatia 2004; Fairclough 1993, 2003) to call attention to particular contentious words or phrases referenced in the attributed source via what is quoted or summarised (*he believed that ... ‘would likely be very negative and possibly biased’*), or by instantiating several types of previously held interactions (*The author submitted letters to the journal / One of these letters was in response to a paper published ... / the author emailed the editorial office*) through *systems of genres* (Bazerman 1994) or *interdiscursivity* (Fairclough 2003), showing that the outcome of writing a conclusive *email* by the participant was in response to earlier texts or genres (*letters, paper*). Just as quotations are specifically included within indirect speech to suit the perspective of writers as case reporters, so too they carry over to the mechanism of *appropriation* (Bhatia 2004, 2017; Fairclough 2003) from texts that are external to the writer’s. As a common form of treating the narrative report in the current move, intertextuality thus helps writers cast a different light on, and add different layers of meaning to, salient texts and discourses that are represented for their logical implications of the topic, thus revealing “how the voices of others are incorporated; how other texts are alluded to, assumed [or] dialogued with” (Fairclough 2003, p. 36).

Over and above, writers do not shy away from other inherently evaluative statements to manage the bad value-system (Hunston, Thompson 2000) surrounding the discourse of misconduct. This is most clearly shown by a bundle of lexical items such as nouns (e.g. *flaws, fraud, sloppiness*), and verbs (e.g. *collude, interfere, pervert*) occurring elsewhere across text moves to imply that ethical concerns reside in the critical nature of a range of alleged misbehaviours in research activities, and to similarly build up relations with the readers in terms of what is expected of those misbehaviours.

With the writers amalgamating factual stories to fill up their narrative report and bring to life stance and other evaluative meanings in various ways, it is fair to say that the example move (and many others in the data) becomes crucial to certain social realities and activities it maintains in discourse representation. This move, in other words, seeks to disclose the shadowy scenarios lying beneath the surface of text about social conflicts that are keyed both to the relational issue of ethical accountability and to the resulting issue of blame. In essence, we see that such scenarios foreground the ambiguity surrounding unresolved issues of authorship and conflicts of interest during the peer review process and publication of scientific work between interacting participants (author and journal’s editorial experts) in earlier face-to-face discourse. More specifically, the scenarios reflexively alert to a set of ‘behaviouralised situations’ where professional judgment and moral responsibility are compromised by the journal’s editorial experts who, in their functional role, are supposed to be in a position of fiduciary trust within the research institutions that host or employ them. Consequently, such

scenarios identify grounds for the author's attribution of blame to those people as a result of their action and role – accountability as an account-giving behaviour. As a matter of fact, we are told about the participant-author being critical of what he sees as the arbitrary behaviour of those experts in situations delineating the domain of their professional integrity and ethical conduct in trust relationships, and holding them accountable for the irresponsible and unreliable standards by which they failed to determine publication of his material as a recognised principle of research integrity.

We can thus reasonably argue that this kind of discursive representation not only turns on account-giving behaviours, but also brings out unequal relations of power (Fairclough 2001) that are glossed over in the surface text. This representation, in other words, gives us a hint of what the participant-author feels about the more powerful participants (review experts) in highly skilled and knowledgeable decision-making areas holding discretionary influence over him (the less powerful participant) by establishing their own limits to, and professionally-biased judgments on, the publication of material, thus carrying out ethically free professional and moral actions in institutional settings where research activities 'should' rely upon trust in those in power. In this way, representing violations of professional responsibilities that expose the research author to unnecessary harm and mistrust in ethical policies as well as risk to his reputation shows just how they are indirectly influenced by those imbalances of power that "work across networks of practices and structures" (Fairclough 2003, p. 16). Just as these power relations work ideologically through the language used within the move, so too they resonate with the social identities of powerful agents who are called 'to account for their own actions' disrupting values and norms in scientific research and its publication process.

3.4.2. Move 2 – *Raising relevant questions in the case*

We have seen how the factual issues in the case scenario are important to give a foretaste and representation of the conflict-related stories constructed around unethical principles and practices of research publishing. Now it is time for a clear issue or several collateral issues that are 'at question' in the unethical case to be brought to the attention by the organisation and be given prominence in the representation of social relations between the interacting social actors - the parties and the organisation. This, then provides the rationale for move 2 (*Raising relevant questions in the case*) employed in the organisational structure of the genre.

In the full examples below, dealing with 'article correction' and 'research evaluation in medicine', respectively, we can read about the organisation raising one or more issues in the cases on behalf of the parties:

- (3) *Question(s) for the COPE Forum*
 - What is the procedure we *should* follow in this case?

- (4) *Question(s) for the COPE Forum*
 - *Should* we allow data collected in service evaluations to be published as research articles? In medical journals, this is *often* seen as an *acceptable* exception; however, *if* research ethics committees are declaring a study “not research”, *should* journals do the same?
 - *Should* the journal have posted a *correction* on the article to provide a more detailed *ethics* statement, bearing in mind that anything labelled a “correction” in a *controversial* area *would be* misinterpreted as an *error* in the research by the critics?
 - How *should* journals respond to blog posts that they *feel* portray them *unfairly* and are *damaging* to the publisher’s reputation?

As can be seen, these examples show that the writers are relying upon the most straightforward, direct questions headed by a *wh*-question word and a stance modal (*should*) or auxiliary verb (*Do/Does*) expressed in the present grammatical tense to allow for many possible answers sought to ethical problems by the organisation itself. Besides stance-making and other evaluatively charged lexical and verbal devices (*ethics*, *correction*, *damaging*) finding their way into the above examples (italics), presenting questions like these provides the move pattern with an initial framework of the discourse and argument that is to follow, while also contending for the potential reader’s attention and thinking about the complexity of ethical problems.

More important still, allowing the organisation to take ownership of the questions goes hand in hand with the choice of a collective self-mention marker (*we*) found across individual texts and sometimes reiterated there. So, the examples above reveal just how the organisation is ready to draw on this pronominal reference to express its own position or stance towards the evaluated matters in hand, and to provide expert guidance on the best professional conduct of research by articulating social relations of action on behalf of the party seeking such a guidance.

3.4.3. Move 3 – Addressing the case

Once a clear issue or several collateral issues are identified, writers are able to display all reasonable efforts made by the organisation to finding solutions to the cause of the conflict happening ‘backstage’. This, then, provides the rationale behind the ADVICE (*Addressing the case*) rhetorical move and sub-moves in offering guidelines and recommendations for the stated issue or problem, and highlighting a possible course of action for good practices in ethically-compliant research or publication, thus justifying the ‘frontstage’ of the organisation’s advisory work.

The text fragments below, dealing with ‘ethics committee approval’, may provide a flavour of this move presented as consistent, streamlined advice or opinion on the particular matter:

- (5) The Forum noted that editors cannot be expected to know the national guidelines for the conduct of research in individual countries. It is up to authors to make sure that they comply with their national guidelines. One suggestion was that the national standards where the research was done should apply here, or the editor could make a judgement on his own national standards [...]. It may be that the research is exempt from approval. But if the editor discovers that the study did require ethics approval and the authors failed to obtain approval, he has a responsibility not only to [...].

As we can see, this move still requires the writer to paraphrase the organisation’s prior utterances by which participant social actors in larger, conflicting discursive events are now (re-)positioned in the logic of a written report. In other words, the move turns on a transformative rhetorical process which is achieved by creating interdiscursive links between the writer’s actual report and the evaluated factual content of prior speakers through indirect reporting (summary). Once again, this process implies *appropriating* elements of social action and practice and *recontextualizing* them (Fairclough 2003) from the offline to the online context of discourse representation, as necessary to provide the move with a reporting function appropriated from earlier discourses and to allow the writers to act as ‘reporters’ of advised cases. By the same token, this process is one which brings out “specifically defined professional (inter)discursive practices” referenced by textual, discursive and contextual factors (Bhatia 2017, p. 28).

This process gives writers something more to aim at, illustrating just how the organisation as a social actor is now vested with a knowledgeable status in the field and is keen to respond to controversial issues in the case (problem-solving response to the case), sensitizing the parties as social actors to recognise ethical and professional research principles, and deflecting challenges between them. In other words, advising here squares with the idea of the organisation acting as a ‘go-between’ for the conflicted parties through a ‘friendly control’ over them. So, it stands to reason that the discourse of the communicative move comes through as an act of social and institutional identity in its own right since it carries over to a professional representation and role of the organisation in fixing ‘what is ethical’ under those circumstances, and establishing social relationships that endow the organisation with accountability for, and commitment to, the troubled waters of ethical research and publication practices. This kind of identity, as defined by the advisory function of the organisation and aligned with its “discoursal aspects of ways of *acting* and *interacting* in the course of social events”

(Fairclough 2003, p. 65, my emphasis), becomes apparent, at least initially, in the features of the above and other texts with the writers making explicit use of third-person subjects (*The Forum noted that ... / Cope/The Committee agreed/advised/recommended that ...*), representing the organisation as a collective unit acting in concert and constructing a collegial collaboration and perspective on the scrutinized and problematized issues. This way of emphasising the “voice” of the organisation not only builds up to both “personal and social dimensions” (Prior 2001, p. 79) of acting competently in the relational system, it also veers towards an *identification* (Fairclough 2003) process of the organisation in terms of its identity-supporting ethical values, while also *identifying* a discourse in action for the participants in the social events.

With this legitimate identity, role and action in place, the collective nature of the advisory process in the current move becomes important as a way of balancing minimum rule and principle-based arguments in ethics with aspirational guidelines and recommendations set for the conflicting parties by the organisation, and discursively bears down on the attendant questions of integrity and accountability of parties and the ways they may be negotiated voluntarily between them. In this vein, the collective nature of advising not only helps articulate the organisation-party fiduciary trust relationship by which advice is sought, it also becomes a matter of successfully negotiating mutually acceptable identities, roles and positions during the earlier (‘backstage’) process of party interactions and the resultant expectations of account-giving social practices.

Bearing in mind that certain elements of evaluated facts by the organisation are now being selectively ‘converted’ into the reporting genre through the dependent process of *recontextualization*, negotiating claims for the parties and informing the wider audience about a number of advisory points involves the writers to make rhetorical decisions about the most salient positions taken by the organisation which should be selected for the reporting activity. Consistent with the mixed range of rhetorical features in Table 3, different stance-making hedges are realised in the current move for intentionally non-committal statements. So, the set of examples below suggests that these features are used to present non-definitive assertions about referential information while referring to speculative possibilities, and to facilitate a professional and institutional voice of the organisation in presenting a state of knowledge on the topics at hand:

- (6) Generally, the correction options are errata [...], but some of the wording is nuanced in ways that might be helpful in this situation.

Sometimes, authors may claim that their study does not need approval.

As there seems to be no institutional oversight, perhaps the editor [...].

Although this could be quite labour intensive, it would prevent these patterns of behaviour in the future.

It is possible that the institution is already aware of the case but [...].

Not only are these hedges used with a suitable amount of caution ‘to protect’ the organisation from coming under fire about any ethical position taken, they also help the organisation conciliate social relations with the parties. Of course, different sets of values for stancetaking are presented in few instances where “an opinion of goodness/desirability” (Hunston, Thompson 2000, p. 3) is always clearly reflected in impersonal phrasing (*that*-clause) to indicate the organisation’s judgement and attitude towards the reported material (*It is good that the journal has a process for discussing this issue ...*).

Yet, we are still dealing with the collaborative practice of requesting and offering advice through the most genuine suggestions or recommendations that mitigate “face threats” (Mills 2003) carried toward the parties (advice-takers) by the organisation (advice-giver), meaning that the more face-sensitive the advice given by the knowledgeable organisation, the greater the acceptance by the party requesting it. On this basis, reliance on complement clauses controlled by a communication verb (*advise* = expressing guidance, suggestion or recommendation as to what someone ‘should’ do), or a tentative (speculative) noun (*suggestion*) shown below, plainly supports this kind of mitigating practice:

- (7) COPE advised that this appears to be unethical research conduct and egregious violation of human ethics.

One suggestion to the editor was that the national standards [...].

While in all such instances of hedging at the clausal outset the writer conveys the organisation’s perspective in the following clause, the use of an *advise* reporting verb shows that it is sensitive to the organisation making an inferential reasoning (a particular guidance, recommendation or suggestion is now being offered by the organisation to the parties with regard to a prudent action) and avoids forcing the parties to comply with a straight insistence of the claim as would otherwise be through an ‘order’ (a clear instruction that should be complied with). This verb (*advise*) usage comes fairly close to modal *should* (*As there seems to be no institutional oversight, perhaps the editor should give the authors the benefit of the doubt.*), which is the most common linguistic strategy for the writers to mitigate the organisation’s strength of the claim (tentative meaning based on inferential reasoning made by the organisation) and negotiate face threat by making the advice

acceptable for the parties' conflicting positions.

In hedging across the text moves, writers also exploit the possibilities made available by conditionals, as in:

- (8) A suggestion was that *if* the paper is accepted for publication, the editor could put a statement or note on the paper around the issue of consent, in the cultural context.

Through the non-assertive value of the "hypothetical conditional" (Declerck, Reed 2001), or *if*-subordinate clause, we can see how this writer is treating the relative content as provisional, pending the acceptance of the situation described in the main clause. In other words, the writer is hedging the certitude of factual outcomes.

Just as the deployment of hedging devices provides the writers with the right strength of claims, politeness and proper position in advice reporting, so too boosting claims helps the writers get off the fence by indicating the organisation's level of certainty about a particular ethical subject under consideration. Thus, we read:

- (9) The role of the editor is to safeguard [...], so an expression of concern is clearly warranted in this case.

There is clear evidence that the spectra have been altered and that this could be [...].

This is not ideal and will regrettably give the impression of insufficient rigour in the execution of a trial and [...].

No doubt, these ways of asserting facts or beliefs through evaluative arguments create a rhetorical platform where the writers are seeking to qualify the organisation's confidence in the truth of referential information and knowledge claims, and telling the parties to conform to a reliable set of ethical standards right off the bat. By narrowing the conciliatory space available to the parties within the reporting structure, boosting (rather than hedging) maximises the interpretative role of the parties in relation to the assertive statements and values of arguments, and strategically works towards engaging them with a more responsible conduct with one another.

But writers also work hard to indicate the organisation's attitude towards what it said in the reported information, as in:

- (10) The Forum agreed *that* posting a correction may be excessive and perhaps a short editor's note would be more appropriate.

The Forum noted *that* this was a very unusual case, both fascinating and alarming.

It is important *that* the letter is linked to the original article, so that the two items are permanently linked.

In addition to conveying a positive attitude as true or correct with the most commonly used *agree* verb (Table 3) to express the organisation's opinion sharing on the matters, or attributing a positive (*more appropriate*) or negative value (*very unusual*) to the intensified statements, these different realization types for attitudinal meanings show just how the writers are bringing the organisation's evaluative perspective and knowledge in the area covered. By so doing, writers achieve a rhetorical effect which constructs a problematic issue worthy of attention in research ethics, and ultimately guides the party as well as the reader through a response.

At times, though, writers used attitude markers to emphasise that some non-negotiable ethical action was required of the rule-governed argument in seemingly legalistic and formally prescriptive style of advice. Consequently, the common advisability discourse function of *should* modal found across the samples develop into the weak "obligation/necessity" (Leech 2005) modal meaning (Table 3) in the example below to stake the evaluative claim to this particular unbiased, objective action, and to demonstrate the limited range of options available to a responsible party, in this case the editor:

- (11) One suggestion to the editor was that the national standards where the research was done should apply here, [...].

On the one hand, this example suggests that the modal acquires an accountability-making function in the immediate context of an obligation now discharged on the party in much the same way as it negotiates an asymmetrical organisation-party relationship of competence. On the other, it suggests that a 'threefold stance' to the claim is also represented in the discourse by including the organisation, the party, and the writer as 'reporter' just as this stance comes through the entire advice move based on perspectivizing previous views via reporting activity.

Outside these (stance) classificatory means of expressing attitude, the requirement set for the parties to be responsible for their research conduct along the primary obligation/necessity meanings does not save the writers from the use of 'up to' prepositional bundles. These assign a sphere of duty or obligation falling upon the parties and count as a contribution to maintaining good, responsible relationships with one another:

- (12) It is up to authors to make sure that they comply with their national guidelines.

3.4.4. Move 4 (*Reviewing the case*) – Move 5 (*Concluding the case*)

In move 4 (*Reviewing the case*), writers essentially report further information on the advice given in the case by establishing a broader understanding of the ethical issue the parties contended with, and stated the successful outcome of the case in the subsequent move 5 (*Concluding the case*) any one time the RESOLUTION heading was not left blank. In this way, writers terminate their ‘frontstage’ reporting activity done with rhetorical series of communicative moves and sub-moves of the case genre, and close curtain to the organisation’s engagement with misconduct cases discussed ‘backstage’ in face-to-face interaction. The rationale of these moves can be seen in the full examples below dealing with ‘parental consent’ in research:

(13) FOLLOW UP:

The reviews for the article were returned and the article was rejected based on the merit of the paper. The matter regarding this specific submission is closed. The authors followed the letter of the law in their country, but the editor still wonders if there should be a universal age for consent of minors, without parental approval.

(14) RESOLUTION:

Case Closed

In the absence of any recurring stance features in move 4, except for some linguistic items in the categories of attitudinal (cognitive) verb (*wonders*) and hedging conditional with *should* modal (underlined), reviewing the case simply focuses on describing and reporting the facticity and further negotiability of ethical issues as they arise from the advisory process.

In this way, the troublesome topic of ‘parental consent’ shows how the routines of ethical research assessment are enacted by the responsible commitment of the organisation, and the constructive resolution of conflict performed between the parties (authors and editors) and their accountabilities as part of the reporting activity of the genre.

4. Conclusion

This study has probed into cases of research and publication ethics as useful sites where writers engage in professional and institutional goals of the COPE organisation, with ‘backstage’ scenarios of misconduct discursively spilling over onto the ‘frontstage’ organisational structure of the case genre. Besides the writer’s use of a standardized generic structure enacted by the medium as well, I have shown how specific communicative moves serve rhetorically distinct purposes of the text-genre in providing information, advice, and

resolution on the case, and how much the linguistic elements referenced by specific move-level texts tell us about socially constructed ethical accountability and the resultant expectations of account-giving research practices between individual actors (parties and organisation). Prominent features of language realized across communicative moves show rhetorically selective strategies of direct and indirect reporting by which writers can dynamically effect the transformation or *recontextualization* of elements of social actions and events, and similarly work with representational, meaning-making resources of text within intertextual and interdiscursive processes of the genre. Allied with these rhetorical strategies is the writer's use of evaluative stance-marking resources by which interacting social actors in different boundaries of time and space are (re-)located in the discursive patterns of the reporting genre. Through stance-making devices writers can articulate epistemic and evaluative judgments by merging their perspective with the attributed sources, and reproduce the material information by constructing arguments and shaping knowledge about ethical problems in research publishing.

Just as the move patterns and their discursive and linguistic resources reveal how concretely backstage social events of scientific misconduct are narrated, reported, and evaluated in the frontstage reproduction and representation of cases, so too they project the social relationships, identities, and roles of the parties as social actors who hold each other accountable for results and the ways these conflicting relationships and roles square with the voice of a professionally and institutionally responsible social actor's organisation. After all, research ethics is as much an 'individual' (party) as an 'organizational' issue and the linguistic analysis has shown that specific research ethical issues of individual's accountability are effectively addressed by the 'friendly watchdog' organisation in socially adjusting a course of actions taken by the parties themselves. Without losing sight of its professional goals, this organisation is committed to codifying conduct recognisable by the parties as good practice in line with its identity role-supporting ethical perspective. So, this compliance-based ethics perspective of the organisation provides a systematic, yet amicable way of organising and resolving the parties' conflicting experience, and ultimately move upstream to a culture of ethical research and publication integrity. This governing ethos of the organisation's operating culture may only encourage ethically exemplary research behaviour from the parties, maximise fiduciary trust in the organisation's gatekeeping role and activity, cope with risks of harm and responsibility involved in a range of unethical research practices, and legitimize the organisation's role in adjusting imbalances of power between the parties before their case goes to court proceedings. Recognising the importance of these aspects in the rhetoric of accountability explains the

complexity of research ethics in today's world and the ways it reconciles ideas about social relations, identities and roles using language. It also however offers analytical insights into the role of the web-mediated genre in providing a framework for social rhetorical actions of the professional community.

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References

- Askehave I., Swales J.M. 2001, *Genre identification and communicative purpose: A problem and a possible solution*, in “Applied Linguistics” 22 [2], pp. 195-212.
- Barrett W. 2004, *Responsibility, accountability and corporate activity*, in “Online Opinion: Australia’s E-Journal of Social and Political Debate” <http://www.onlineopinion.com.au/view.asp?article=2480>.
- Bazerman C. 1994, *Systems of genres and the enactment of social intentions*, in Freedman A. and Medway P. (eds.), *Genre and the New Rhetoric*, Taylor & Francis, London, pp. 79-101.
- Bhatia V.K. 2004, *Worlds of Written Discourse*, Continuum, London/New York.
- Bhatia V.K. 2017, *Critical Genre Analysis: Investigating Interdiscursive Performance in Professional Communication*, Routledge, London/New York.
- Bax S. 2011, *Discourse and Genre: Analysing Language in Context*, Palgrave, Basingstoke/New York.
- Beck U. 2000, *World Risk Society*, Polity Press, Cambridge.
- Biber D., Connor U. and Upton T.A. 2007, *Discourse on the Move*, Benjamins, Amsterdam.
- Biber D., Johansson S., Leech G., Conrad S. and Finegan E. 1999, *Longman Grammar of Spoken and Written English*, Pearson Education, London.
- Biber D. and Conrad S. 2009, *Register, Genre and Style*, Cambridge University Press, Cambridge.
- Declerck R. and Reed S. 2001, *Conditionals: A Comprehensive Empirical Analysis*, Mouton de Gruyter, Berlin.
- DuBois J.M., Anderson E.E., and Chibnall J. 2013, *Assessing the need for a research ethics remediation program*, in “Clinical and Translational Science” 6 [3], pp. 209-213.
- Evetts J. 2011, *Sociological analysis of professionalism: Past, present and future*, in “Comparative Sociology” 10, pp. 1-37.
- Fanelli D. 2009, *How many scientists fabricate and falsify research? A systematic review and meta-analysis of survey data*, in “PLoS One” 4. <https://doi.org/10.1371/journal.pone.0005738>.
- Fanelli D., Costas R., Fang F., Casadevall A. and Bik E. 2019, *Testing hypotheses on risk factors for scientific misconduct via matched-control analysis of papers containing problematic image duplications*, in “Science and Engineering Ethics” 25, pp. 771-789.
- Fairclough N. 1993, *Discourse and Social Change*, Polity Press, Cambridge.
- Fairclough N. 2001, *Language and Power*, Longman, London.
- Fairclough N. 2003, *Analysing Discourse: Text Analysis for Social Research*, Routledge, London.
- Garzone G. and Santulli F. 2004, *What can corpus linguistics do for critical discourse analysis?*, in Partington A., Morley J. and Haarman L. (eds.), *Corpora and Discourse*, Peter Lang, Bern, pp. 352-368.
- Goffman E. 1959, *The Presentation of Self in Everyday Life*, Doubleday, New York.
- Halliday M.A.K. and Matthiessen C. 2004, *An Introduction to Functional Grammar*, Arnold, London.
- Hieronymi P. 2004, *The force and fairness of blame*, in “Philosophical Perspectives” 18 [1], pp. 115-148.

- Hunston S. and Thompson G. 2000, *Evaluation in Text: Authorial Stance and the Construction of Discourses*, Oxford University Press, New York.
- Hyland K. 1994, *Hedging in academic writing and ESP textbooks*, in “English for Specific Purposes” 13 [3], pp. 239-256.
- Hyland K. 1998, *Hedging in Scientific Research*, John Benjamins, Amsterdam.
- Hyland K. 2005, *Stance and engagement: A model of interaction in academic discourse*, in “Discourse Studies” 7 [2], pp. 173-192.
- Kanoksilapatham B. 2005, *Rhetorical structure of biochemistry research articles*, in “English for Specific Purposes” 24, pp. 269-292.
- Leech G. 2005, *Meaning and the English Verbs*. Longman, London.
- Luhmann N. 1979, *Trust and Power*, Wiley, London.
- Mills S. 2003, *Gender and Politeness*, Cambridge University Press, Cambridge.
- Prior P. 2001, *Voices in text, mind and society: Sociohistoric accounts of discourse acquisition and use*, in “Journal of Second Language Writing” 1 [2], pp. 55-81.
- Sarangi S. and Brookes-Howell L. 2006, *Recontextualising the familial lifeworld in genetic counselling case notes*, in Gotti M. and Salagar-Meyer F. (eds), *Advances in Medical Discourse Analysis: Oral and Written Contexts*, Peter Lang, Bern, pp. 197-225.
- Sarangi S. and Candlin C.N. 2003, *Categorization and explanation of risk: A discourse analytical perspective*, in “Health, Risk & Society” 5 [2], pp. 115-124.
- Steneck N.H. 2006, *Fostering integrity in research: definitions, current knowledge, and future directions*, in “Science and Engineering Ethics” 12 [1], pp. 53-74.
- Swales J.M. 1990, *Genre Analysis. English in Academic and Research Settings*, Cambridge University Press, Cambridge.
- Swales J.M. 2004, *Research Genres: Explorations and Applications*, Cambridge University Press, Cambridge.
- Toolan M. 2001, *Narrative: A Critical Linguistic Introduction*, Routledge, London.
- Yates J. and Orlikowski J.W. 1992, *Genres of organizational communication: A structural approach to studying communication and media*, in “Academy of Management Review” 17 [2], pp. 299-326.

Annexes

Overall generic structure		
COPE Standard Headings	Section headings and generic move function/purpose	%
<u>TITLE</u>	Introducing the topic of case by title: - enticing reader's interest, setting a tone and creating an expectation	100
CASE NUMBER	Identifying the case by: - attribution of serial numbering and dating system	100
CASE TEXT (ANONYMISED)	Move 1 – Presenting the case scenario by: - providing factual recounts via selection of important information: parties, and issues of complaint, doubt or conflict for poor (unethically-compliant) research/publication practices - offering counter-points to poor practices	100
<i>Question(s) for the COPE Forum</i>	Move 2 – Raising relevant questions in the case by: - providing a clear issue or problem statement in the scenario or several collateral issues to be answered in the case scenario	100
ADVICE	Move 3 – Addressing the case by: - offering guidelines and recommendations for the stated issue or problem: highlighting a course of action for good practices in ethically-compliant research/publication - asserting values or benefits of good practice	100
FOLLOW UP	Move 4 – Reviewing the case by: - providing further information on the advice given in the case - establishing a deeper understanding of the ethical issue or problem the parties contend with	100
RESOLUTION Case closed /On-going	Move 5 – Concluding the case by: - stating the successful outcome of the case as it results from advice and follow-up information	100
<u>YEAR</u>	Linking to case taxonomy by year: - filtering reader/user enquiry into organisation's case classification and keywords	100
CLASSIFICATION	Providing comprehensive case classification scheme by: - facilitating the user's coding and learning of cases from organisation's databases, including detailed documents and resources (e.g. <u>Ethical oversight</u> / <u>Questionable</u> / <u>unethical research</u>)	100

Table 2
Cases of research and publication ethics: overall generic structure with specific genre's move function/purpose.

Move	Lexical and grammatical stance-marking resources	N.	%
CASE TEXT	a) <i>Hedges</i>		
	Epistemic verbs	65	20
	Epistemic adjectives	29	9
	Epistemic adverbs	21	7
	Epistemic nouns	8	2
	Subtotals	123	38
	b) <i>Boosters</i>		
	Adjectives	19	6
	Adverbs	12	4
	Nouns	10	3
	Verbs	8	2
	Subtotals	49	15
	c) <i>Attitude markers</i>		
	Adjectives	33	10
	Sentence adverbs	18	6
	Verbs	12	4
	Subtotals	63	20
	d) <i>Self-mentions</i>	15	5
	e) <i>That</i> complement clause	47	15
	f) <i>To</i> -infinitival clause	13	4
	g) Conditionals	10	3
	Subtotals	85	27
	Totals	320	100
ADVICE	a) <i>Hedges</i>		
	Epistemic verbs	87	22
	Epistemic adjectives	15	4
	Epistemic adverbs	12	3
	Epistemic nouns	32	8
	Subtotals	146	37
	b) <i>Boosters</i>		
	Adjectives	27	7
	Adverbs	10	3
	Nouns	6	1
	Verbs	18	4
	Subtotals	61	15
	c) <i>Attitude markers</i>		
	Adjectives	21	5
	<i>Agree</i> verb	46	12
	Necessity/obligation modal verb (<i>should</i>)	8	2
	Subtotals	75	19
	d) <i>Self-mentions</i>	-	-
	e) <i>That</i> complement clause	85	21
	f) <i>To</i> -infinitival clause	10	3
	g) Conditionals	21	5
	Subtotals	116	29
	Totals	398	100
FOLLOW UP	a) <i>Hedges</i>		
	Epistemic verbs	8	32
	Epistemic adverbs	6	24
	Subtotals	14	56
	b) <i>Attitude markers</i>		
	Verb	4	16
c) Conditionals	7	28	
Totals	25	100	

Table 3

Frequency of lexical and grammatical stance devices in specific move-level texts.