

Biased Discourses in Sports and Media Myth or Reality

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Abstract: *Members of a discourse community must have recourse to a shared system of communication in order to share information and knowledge effectively. Science has developed in such a way that scientific knowledge is shared in a manner that relies heavily on written communication and a highly structured format for presenting arguments in different science domains, sports sciences not being an exception. Thus, Montgomery claims that science would not exist if scientists were not writers" and science "in great measure is a matter of language". He further reflects that although it cannot be denied that science is much more than a construct of speech, it must be acknowledged that linguistic form and content cannot be separated. Recently, there have been a number of studies that seek to demonstrate that the scientific style of writing is much more than a mere objective channel through which to communicate scientific "facts" and incontrovertible "truths". Bhatia notes that the nature and construction of a specific register and genre, especially sports sciences genre, are characterized by the communicative purpose that it is intended to fulfill; that the language used in scientific writing reflects the position it holds in a particular context and thus needs to be rhetorically analyzed.*

Keywords: Discourse(s), bias, sports, communication, Paralympics.

1. Introduction

A dominant feature of scientific writing is grammatical metaphor, i.e. deriving from the lexical term of one word another word of a different class. This transcategorisation signifies the birth of a new technical vocabulary that forms the basis of modern scientific expression (Halliday and Martin, 1993, p. 12). Furthermore, scientific language uses grammar in such a way as to position science outside of human influence. The preference for the passive voice alongside the preference for abstract nouns derived from verbs projects science as an objective description of the way the world is, rather than as a human activity susceptible to error and misjudgment (Lemke, 1990, pp. 130-131).

Other features of scientific expression that identify it as such are: a strong temporal and causal perception. This style of narrative reflects scientific discourse's preference for reporting a story as a chain of events that can easily be replicated (Junker, 1999, p. 253) and lexical density, i.e. how many words are packed into the clause. In the formalized, written style of scientific expression, the number often rises to six to eight lexical words per clause; this reveals the planned nature of scientific communication and highlights its tendency to alienate readers who are not part of the discourse community (Halliday and Martin, 1993, p. 76). These features that are imposed on scientific communication are often subtle features of scientific style but they enable the clear identification of scientific writing and whether an example of writing belongs to that specific discourse community. It seems that specific discourse community of sports literature needs revising not only language units used but whole discourses to render them free from bias and prejudices.

2. Perspectives on Scientific Discourse Paralympics' Discourse

Paralympians want to be seen as simply athletes, judged for their performances. In the discourse of and around the Paralympic Games, disability is something that competing athletes have but it not coterminous with them. And yet, disability itself is never too far from any Paralympics performance. In accordance with our aim to explore the discourse of sports literature, especially discourse of Paralympics and sports media coverage, we report the application of genre analysis to a selection of sports sciences related research article abstracts (comprised in a corpus of 60 selected research articles from Athletic Insight-The Online Journal of Sports Psychology, published within 2005-2011), in an attempt to explore the conceptual and thematic structure of such abstracts.

The aim here is not purely to define the features of the genre (abstracts) and a particular sub-genre (sports sciences related research article abstracts), but also to study the abstract as an effective information retrieval tool and to further define the features and structure of the well formed abstract so as to complement guidelines of abstract writing. The objectives of the wider scope sports discourses study were to define the typology and functions of abstracts to fully understand their purpose, scope and use; to clarify the nature of scientific language, discourse and knowledge and its effect on subject-specific abstracts but this paper will concisely try to establish the structure of science abstracts through the definition of "moves"; to discover how the thematic structure of the abstracts reflects the subject discourse; and to determine how closely abstracts follow stipulated guidelines.

3. An Abstract - Condensed Document Representation

The abstract, stated simply, is an example of condensed document representation. Van Dijk's work on macrostructures is particularly useful in understanding the processes, production and uses of condensed documents. Van Dijk (1980, pp. 4-6) suggests that language users implicitly and explicitly differentiate between local and global structures of discourse: although users employ both notions of detail and particulars to speak of the parts of a discourse, to refer to the general discourse, language users employ terms such as gist, topic or theme. These general terms point to what is considered relevant, central or crucial to what is being communicated; he observes that these notions represent the meaning or content of the discourse and not the style of expression. The former he labels macrostructures; the latter microstructures. Following the theory of macrostructures as introduced by Van Dijk, condensed document representations can be viewed as examples of macrostructures and macro strategies in action. Van Dijk (1980, pp. 14-15) identifies two functions of macrostructures: (1) Macrostructures organize complex information – without them, language users would only be able to formulate information units at the local level and would not be able to group these microstructures together to form the higher-level information units that constitute the main theme of the discourse. This function allows coherence between information units and aids memory and comprehension. (2) Macrostructures enable the reduction of complex information – they allow the language user to identify the more relevant, abstract or general information from a complex discourse and to disregard the (micro)-information. Together, these functions enable the more efficient storage and retrieval of complex information. Clearly, the application of this model is very relevant to understanding the functions of condensed document representations; the latter also represent the higher-level information units of an original discourse or text by formulating the macrostructure, disregarding the micro-information and thereby efficiently storing complex information for future retrieval and problem solving tasks.

3.1 Style and Content

The ability to present clearly, concisely, and unambiguously the main points of an original document determine the usability and effectiveness of an abstract. Certain factors and characteristics could all be considered instrumental in whether an abstract fulfilled its role as facilitator in selecting or not selecting material, acting as a substitute of an original document or saving time for the user during the research process. These characteristics and factors are:

Brevity - The asset of using abstracts in information retrieval is that they are considerably shorter than the original document. All languages are full of redundancy, the majority of which can be removed during the abstracting of the parent text (Borko and Bernier, 1975, pp. 9-10). However, the lack of redundancy can impede reading comprehension. Pinto and Lancaster (1999, p. 243) observe that although the length of the abstract is one of the few things that abstracting

guidelines can proscribe, in terms of recommended number of words, brevity “should always be secondary to other considerations such as exhaustivity and accuracy”.

Exhaustivity - It is the extent to which the abstract succeeds in including all of the information that is relevant to the intended audience. By covering all the essential points of the original document in the abstract, the user will have more access points to the contents of the parent text, thereby enabling a more informed selection decision.

Accuracy - For an abstract to actually act as a substitute for the original document, it is essential that the information summarized is completely accurate and represents the parent document faithfully. A study by Pitkin et al. (1999) found that a considerable percentage of abstracts failed to give correct data and in some instances failed to contain the correct data at all. Such inaccuracy destroys the ability of the abstract to save the user time and to provide an accurate representation of the original text to help selection and retrieval.

Density - Density is related to the brevity and exhaustivity of the abstract – given that all the relevant information is included, the shorter the length of the abstract, the greater the density of information found therein (Pinto and Lancaster, 1999, p. 244). Both Kaplan et al. (1994) and King (1976, pp. 119-120) suggest that propositionally and lexically dense texts are generally more difficult to read and can therefore reduce the quality of the abstract.

Clarity - The clarity of an abstract is realized by the abstractor's use of language to represent the main points of the original document. This includes the vocabulary and the grammatical structure of the abstract.

Content - An informative or indicative abstract has two main parts: the reference, which points the users to the original document; and the body, which contains the condensed information from the original document. A study by Borko and Chapman (cited in Borko and Bernier, 1975, pp. 36-53) found that the body of a well-formed research article abstract must contain, at the very least, information on purpose, method, conclusions, and specialized content. In her example of abstract structure, Liddy (1991, pp. 55-81) proposes that abstracts of scientific research articles should closely follow the text structure of the parent document.

Context - The final factor that can influence the format of the abstract is the context in which it is written. Factors such as the intended audience and the function of the abstract determine how the abstract is structured. Generally, the information services that provide abstracts can be divided into those that are discipline-oriented services and those that are mission-oriented services.

Discipline-oriented services aim to provide comprehensive coverage of a given field of knowledge by capturing the literature at the time of its primary publication and adequately indexing and abstracting it. The mission-oriented services direct their publications to an identified user group that has a specific area of interest usually defined in terms of

a task rather than a traditional discipline (Borko and Bernier, 1975, p. 4).

3.1 Methods - Levels of Analysis

Bhatia (1993, pp. 22-24) suggests the following steps to perform a successful genre analysis: (1) Placing the given genre-text in a situational context. (2) Surveying existing literature. Including literature on: tools, methods or theories of linguistic/discourse/genre analysis; practitioner advice, guide books etc. relevant to speech community; and discussions of the social structure, history, beliefs and goals of the academic community which uses the genre in question. (3) Refining the situational/contextual analysis. One need to: define the speaker/writer of the text, the audience, their relationships and goals; identify the network of surrounding texts and linguistic traditions that form the background to the particular genre; and identify the topic/subject which the text is trying to represent, change or use and the relationship of that text to reality. (4) Selecting the corpus. (5) Studying the institutional context. This information can be found in guidebooks, manuals and practitioner advice and discussions. It is important if the data is collected from a particular organization, which often imposes its own constraints for genre construction. (6) Levels of linguistic analysis.

3.2 Move Analysis

The “move” is closely related to the concept of “macrostructures” as defined by Van Dijk (1980). These “moves” represent the main themes of the text and aid the reader in selecting and understanding the different meaning units contained therein (Endres-Niggemeyer, 1998, p. 59). Moreover, the individual “move” has its own communicative function to fulfill, which, in turn, serves the major communicative purpose of the genre (Santos, 1996, p. 495). Endres-Niggemeyer and Santos define five moves that constitute the research article abstract. Our analysis adapted this five-move pattern and analyzed whether the abstracts reflected the accepted cognitive structure of abstracts and achieved document representation successfully and succinctly.

As for thematic structure Kaplan et al. (1994) suggests that how the abstract writers use thematisation has a direct impact on the persuasive quality of these abstracts. Following the thematic analysis presented by Halliday and Martin (1993), it was decided that the use of grammatical subjects as markers of theme would be analyzed in this study. Grammatical subject functions in the abstracts were analyzed according to the four domains (using 16 sub-domains) identified by Kaplan et al. (1994, pp. 407-408):

- 1) **Participant domain:** a) Discourse participant – direct reference to the writer(s) that offers highest visibility to the writer, b) Participant viewpoint – reference to the writer through focus on research activities and/or outcomes, c) Interactive participant – direct reference to other researchers by name.
- 2) **Discourse domain:** a) Discourse event/process – reference to the processes of reporting one’s research. b) Macro-discourse entity – reference to units of discourse, c) Micro-

discourse entity – reference to discourse internal entities. d) Interactive discourse entity – references to units of discourse other than the writer’s own discourse entity, e) Empty discourse theme – themes beginning with it as dummy subject.

- 3) **Hypothesized/objectivised domain:** a) Hypothesized viewpoint – comments and judgments about research matters. b) Objectivised viewpoint – reference to evaluative judgments (involving adjectival or adverbial modifications of the nominal forms). c) Hypothesized entity – models and/or research devices that are hypothesized to measure/produce something. d) Empty hypothesized and objectivised theme – empty themes introducing evaluation through formulaic expressions.
- 4) **Real world domain:** a) Mental processes – implicates intellectual entities/processes as part of the “real” world research domain. b) Real world entity – material entities/objects. c) Real world event process – actions/processes as the target of research. d) Empty real world theme – empty themes introducing “real” world entities/actions.

3.3 Results – Move Analysis

A move analysis of the 60 abstracts in the corpus revealed that the structure of such material was encapsulated in five moves: **Move 1** – Relation to other research. There were four instances of this move in the corpus (33 per cent). An interesting feature of this move was that in half of its occurrences, it merged with move 4 (summarizing results). Alternatively, when move 1 occurred independently and as the initial move, it appeared as a clear statement of knowledge about the larger research area or about past research as a starting point from which authors would introduce and launch their own research, thereby lending it credibility. **Move 2** – Purpose. In all instances of move 2 in the corpus, it announced the research article’s content by describing the key features of the research, or by presenting the main purpose. Eight of the 60 abstracts contained this move. There were five instances that described the main features of the research. Again, there was evidence of move embedding in this move, as move 2 appeared with move 3 (methodology) in two instances. In both instances, move 3 was introduced into this move only partially and did not carry substantial information. There were also a number of ways in which the abstract authors indicated the main purpose of the research. Two out of the three instances of this sub-move occurred as a discrete move. The purposive nature of this sub-move was conveyed via the verb phrase: “the study was conveyed in order to test . . .” or through the nominal phrase: “the aim of this study . . .” **Move 3** – Methodology. This move occurred in all 60 of the abstracts included in the corpus, and therefore can be considered an obligatory element of the abstract. In all cases, this move indicated the subjects, apparatus, procedures and variables of the research. There was a high incidence of move 3 merging with both move 2 and move 4, either partially or completely. Move embedding between move 2 and 3 occurred twice in the corpus, move embedding between move 4 and 3 occurred six times, whereas move 3 appeared separately four times. In 50 per cent of the cases where move 3 appeared independently of any other move, it was signaled by the data, procedures or

materials being placed in subject position. In one example, rather than thematising the methods etc., the author indicated the onset of move 3 by overtly drawing the reader's attention to the methodology by outlining the steps taken in the experimental process: "The initial approach, which involved . . ." In the majority of occurrences of move 3, the author chose to use the past tense with the passive voice. However, in one instance, the author broke with convention and used the active voice, making the researchers the subject of the sentence. **Move 4** – Summarizing the results. Move 4 was present in all 60 of the abstracts included in the corpus. It was a move that summed up the most important findings of the research. There were a number of elements that signaled the onset of this move. Primarily, move 4 sentences contained lexical items that specifically signify "results" or "findings". Secondly, the results were thematised in all instances of move 4, that is, the results, data or findings were placed as the syntactic subject. In all but one instance of move 4, the authors used the past tense. Furthermore, there was a high incidence of evaluative terms in the move, such as "important role", "significant", "and significantly higher". **Move 5** – Discussing the research. Move 5 was found in eight of the 60 abstracts. It was realized by a concluding statement and/or a statement of recommendation. Move 5 has two sub-moves as well.

4. Conclusion

Since thematic structure of abstracts in sports literature was our main focus we can confirm Kaplan et al. (1994, p. 406) suggestions that the choices that the abstract authors make regarding thematisation affect the persuasive quality of the abstract. Rashidi (1992, p. 192) observes that this constituent moves "the decoder [reader] towards the core of the communication". Thus, its importance as a persuasive tool is evident. Furthermore, Brown and Yule (1983, p. 99) propose that an analysis of theme is clarificatory as it serves as a way to realize the structure of a text and what meaning the author wishes to impart to that piece of information. They note that the "thematic organization appears to be exploited by speakers/writers to provide a structural framework for their discourse". Moreover, it appears that the choice of grammatical subject as a marker of theme reveals how the writer seeks to position him/herself in their discourse community and against other discourse communities. The results of this study suggest that the authors of the abstracts in the corpus prefer to position themselves and their research in two main ways:

(1) There were 28 instances of presenting the theme in the discourse domain, that is, focusing either on the processes of reporting one's research, referring to units of discourse, to discourse internal entities or to units of discourse other than the writer's own discourse entity. This suggests that the writer presents his/her research as part of the discourse community and that this thematisation results in the research being accepted into the wider discourse community. (2) There were 45 instances of the writer thematising the grammatical subject as part of the "real" world domain, that is, that the research in question constitutes an answer to a relevant "real" world research problem. A third, but less usual way in which the writers thematise their subject is to

present the theme in the participant domain (three instances). It is possible that this method is less prevalent as it includes direct reference to either the researcher or to other named researchers in the discourse community. Such writing is unusual in scientific communication, which seeks to impose an objective, de-humanized tone to its research literature (Lemke, 1990, p. 130).

This study was an attempt to establish the structure of sports sciences related research article abstracts through the definition of moves; to discover how the thematic structure of the abstracts reflected the subject discourse; and last, to determine how closely abstracts follow stipulated guidelines. The abstracts in the corpus followed a five-move pattern: relation to other research, purpose, methodology, results and discussion of the research. However, these five moves were dependent on the type of abstract involved and the communicative function that it serves. These findings correspond to the conclusions of a similar study on applied linguistics abstracts undertaken by Santos (1996, p. 496). However, in the corpus, only moves 3 and 4 appear all the time, with the other moves only being used to suit the communicative needs of the author. This provides evidence that the move selection in the corpus falls short of an acceptable standard for abstracts. In addition, there was some inconsistency in the corpus regarding semantic organization of moves, with a minority of abstracts showing conceptual scatter and consequently impeding reading comprehension. Similarly, Salager-Meyer (1990, p. 380) noted that conceptual scattering and illogical ordering of moves revealed an inability to structure the semantic units of the text in a way that enabled the reader to easily understand the meaning of the text. This study also revealed considerable use of move embedding.

Secondly, the thematic structure of the abstracts showed that the authors generally succeed in reflecting the scientific discourse. The results demonstrated that the abstracts thematise the grammatical subject by referring to the discourse domain and the "real" world domain, thereby positing their research within the objectivised, detached world of modern scientific communication.

Finally, in answer to the question regarding how closely abstracts follow stipulated guidelines, we conclude that, in general, the abstracts succeed in this task. However, there were a few discrepancies. There were some formulaic expressions, introducing moves that were evidence of lexical redundancy. Further, a small number of abstracts showed authorial presence in the text via personal pronouns, which demonstrated subjectivity. Last, some of the abstracts revealed conceptual scatter that impeded clarity of meaning. It is notable that there was a higher incidence of the briefer and less informative-rich indicative abstract in the last three years.

5. Pedagogical Implications

We suggest that the lack of formal training in abstract writing increases the risk of subjectivity and verbosity and reduces clarity in scientific abstracts. This study raises a number of

issues that have relevance for both abstracting and indexing services and abstract authors. On the whole, it is imperative that the abstract fulfils its function as a type of condensed document representation and successfully represents the main arguments of the parent document logically, coherently and briefly, so that the reader can assess relevance and gain access quickly.

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