A CRITICAL REVIEW OF PEDRO MARTIN-MARTIN'S (2008) 'THE MITIGATION OF SCIENTIFIC CLAIMS IN RESEARCH PAPERS: A COMPARATIVE STUDY'

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1. INTRODUCTION

This paper presents a critique of Pedro Martin-Martin's (2008) highly acknowledged research paper on the mitigation of scientific claims in research papers. To do this end, I first give a vignette of the strengths of his work, which include clarity of thought, depth of subject matter and explicitness of results. On the other hand, the study could have been affected by both micro and macro inexactitudes. Grammatical infelicities as concord, article omission and unclear referents can hardly go unnoticed. At the macro level, the paper is characterised by rhetorical difficulties, methodological biases and weak presentation of evidence/illustrations. The overarching goal of the review is to expose the strengths and weaknesses of the article.

2. SUMMARY

In his work Martin-Martin (2008) compared the mitigation of scientifc claims in research articles (RAs) written in English and Spanish. The thrust of the study was to explore how hedging was instantiated by English and Spanish researchers in respect of linguistic devices and frequency of occurrence in the discourse community of Clinical and Health Psychology. Using a random sampling method, Martin-Martin (2008) sampled a total of forty (40) RAs written in English and Spanish (i.e 20 English, 20 Spanish) from what he terms "two of the most prestigious international journals" (p.140): *Health Psychology* and *British Journal of Clinical Psychology* and *Anales de Psicologia y la Revista de Psicologia General y Aplicada* for English and Spanish texts respectively.

The study yielded three major findings. First, the research showed that although both English and Spanish authors were mindful of the efficacy of mitigation in their research papers, the phenomenon was more observed by the former than by the latter. In spite of the difficulties, the author faces is an attempt to explicate this result, he, none the less, asserts that differing rhetorical units in the RA have different distributions of hedges. For example, according to Martin-Martin (2008), it is in the Introduction and Conclusion/Discussion units that the highest levels of claims are made, and therefore receive the most commensurate hedging devices.

The author further advances that the most frequently used strategy in both groups of texts is the strategy of depersonilisation, which he explains as those cases in which the writers diminish their presence in the texts to relieve themselves of responsibility for the truth of the propositions expressed by recourse to their choices of appropriate linguistic resources. Examples are impersonal active and passive constructions. On the other hand, English and Spanish RAs, Martin-Martin (2008) avers, differ principally on account of their use of the indetermination strategy. He explains that English-speaking writers resorted more frequently to making their claims more tentiative and indeterminate, thereby mitigating the strengths of their assertions in a bid to achieve greater acceptance from the members of the research community. Among the Spanish writers, the chief motivation was to maintain interpersonal relationship between writer and reader. Such a need was informed by a protective strategy not to sound too offensive to the other scholars.

One other finding of the study indicates that rhetorical variation in research papers is tied to the socio-pragmatic context in which the texts are produced. Martin-Martin (2008) explains this assertion to mean that it is only through an ethnographic evaluation of writers' motivations for the use of certain rhetorical strategies that one could arrive at a satisfactory explanation for where the boundaries between cultural background and socio-pragmatic aspects lie. On this account, he in part dismisses the form-function model often associated with hedges. In the following section, I now turn attention to the strengths and weaknesses in the work.

3. EVALUATION

In this section of the review, I bring to light both the merits and shortfalls contained in Martin-Martin's (2008) work.

3.1 Merits of the Work

Perhaps, the chief strength of the author's paper is expressed in his clarity of thought. Clarity of thought in academic communication is not only desirable, but a virtue strongly pursued by all academics in order to make the most impact as far as communication is concerned. Quite apart from the author's choice of appropriate diction, the paper makes an interesting reading on the basis of its fluidity.

Akin to the above is the fact that Martin-Martin (2008) demonstrates a formidable in-depth grasp of the subject matter: mitigation. This knowledge is evidenced by his articulation of the literature on mitigation in general and hedging to be specific, tracing the origin of the latter down to the footsteps of Lakoff's (1973) seminal treatise "Hedges: A Case Study in Meaning Criteria and the Logic of Fuzzy Concepts" (cited in Martin-Martin, 2008). Martin-Martin also takes pain to clarify related terms such as modality and evidentiality, thereby pointing to readers that he has an unwavering mastery over his field of research. Also useful for the comprehension of the paper is the author's attempt at providing a taxonomy of hedges through to Brown and Levinson's (1978) ground-breaking research on politeness down to such recent scholars as Hyland (1994) and Salager-Meyer (2001). What is particularly striking about his classificatory system is his adroitness in compressing the literature on ways of heding into three basic types of strategies: (a) indetermination, (b) subjectivisation, and (c) depersonalisation. The net effect is that Martin-Martin

(2008), first and foremost, obviously, specifically situates his work within the broader framework of mitigation in academic communication, while he takes well calculated steps at narrowing the focus of his study.

Unsurprisingly, the author's effort yields good results that add to our knowledge on mitigation and hedging. Embedded in both statistical and qualitative analyses, the findings of his study are apt in as much as they support the extant literature where need be, as well as make a case for a point of departure when the situation calls for that. Here is an example:

Epistemic modality is also frequently found in the Introduction unit in both languages in those moves in which writers try to justify their work in their research field by indicating a gap, that is, by pointing out possible topics or areas that still need research, or by showing disagreement with the results of previous studies (See Swales, 1990: 141, found on p. 143).

Besides, the findings are discussed in well-developed paragrahps: such a rhetorical development of the findings, thus, enhances the processing of the ideas presented by the author.

3.2 Shortfalls of the Work

3.2.1 Micro-weaknesses

We start first with micro-weaknesses noticeable in Martin-Martin's (2008) paper. I have labelled these errors as those pertaining to linguistic inexactitudes, prominent among which is the error of concord. This error, according to Yankson (1989), is so grave because it signals linguistic incompetence. In the introduction to his book, he asserts that "…there are some errors like concord rule deviances which tend to elicit vey unfavourable responses from both native and non-native speakers/hearers alike. Such errors reflect badly on the speaker's personality; they tell us something about his educational background; they portray his interlanguage as 'a developing grammar' that borders on illiteracy" (Yankson, 1989: xi). Although it cannot be said that Martin-Martin has little grasp of the grammar, we, however, cannot gloss over the concord errors observable in his paper. Below are some examples:

1. *An increasing number of research studies on a variety of disciplines… has (sic) been able to demonstrate….* (p. 135).
2. *… exact data is (sic) missing…* (p. 135).

As can be appreciated from the above, the author confounds the plurality of the complex noun phrase subject "An increasing number of…" to denote a singular concept, although in the idiom of the English language the expression "a number of" is largely plural in nature in Example 1. Perhaps, this explanationn stems from the indefiniteness of the expression as opposed to "the number of" being more specific and definite, and thus denotes singularity.

In example 2, Martin-Martin uses the plural noun data as a singluar item, an error often made by many a people in technical communication (See *Oxford Advanced Learners' Dictionary*). Does he by this error suggest that the plural of data is *datas*, *datae* or *datums* to argue for the perspective of technical usage?

Another linguistic setback of the paper is found in the author's use of unclear referents. Halliday and Hassan (1976) simply refer to this concept as *phora*. These referents, which were normally cast in the form of the demonstrative pronoun *this*, appeared in two basic ways *viz.* clear referents and unclear referents. In the former, the author was capable of making the most communicative effect, as in

3. Strategy of Depersonilsation. THIS refers to those cases… (p. 139, *emphasis mine*).

However, a number of sentences in the paper are occasioned by the use of *this* in quite ambiguous ways. I have therefore provided the context in which the pronoun was used in order to enhance the appreciation of the analysis. Below are few of them:

4. The results of the comparative quantitative analyses revealed that there are similarities between the two languages regarding the distribution of hedges across the structural units of the RAs, although a certain degree of rhetorical variation was also found mainly in terms of the frequency of use of the strategy of indetermination (i.e. modality devices and approximators) which occurs to a much greater extent in the English texts. THIS suggests that…. (Abstract, p. 133, *emphasis mine*)

It is evident from the Illustration 4 that Martin-Martin intended to make a cataphoric use of the referent *this*. This grammatical deployment, however, is problematic because it is difficult to identify its antecedent: does it refer to the statement preceding it or the strategy of indetermination to say the least? Such ambiguity makes reading wady. Here is another example:

5. In the Conclusion/Discussion unit, where the highest level of claims is made, a common strategy is the use of impersonal active constructions which, by nominalising a personal projection, suggest that the situation described is independent of human agency. THIS is a rhetorical practice …

Like Example 4, it is not clear what the cataphoric term *this* seeks to explain as to whether it refers to the previous declarative sentence, the Discussion/Conclusion unit or its closest antecedent—human agency.

The omission of articles is another problem found in the paper. In the grammar of English, such modern grammarians as Quirk and Greenbaum (1973) and Greenbaum (1996) have averred that the definite article *the* and the indefinite articles *a* and *an* often precede count nouns to either specify or make inderteminate nominal elements, given the syntactic contexts. And even though there are exceptional cases where this rule holds (e.g. I'm going to hospital/school), Martin-Martin (2008) contains errors of the omission of these articles. Let us observe some examples:

6. … face saving strategies intended to obtain (sic) speaker's or writer's acceptance, … (p. 134)

We know from the rule of grammar that the correlative direct object 'speaker' and 'writer', though emplpoyed as genitives of the head noun acceptance, should have been preceded by the singular indefinte article *a*.

7. Awareness of intercultural rhetorical preferences is … (p. 149)

Could it not have been better to predicate the abstract noun 'awareness' with the singular indefinite pronoun *an*, despite that it is generally considered a non-count noun?

Having dealt with some issues of language difficulties founs in the article, I now focus on the macro-weaknesses. Here I will examine the rhetorical structure, methodological approach and use of evidentiality/illustrations of Martin-Martin's (2008) paper.

3.2.2 Macro-weaknesses

3.2.2.1 Rhetorical Structure of the Work

In terms of the organisational quality of the article, one needs to be very careful in making sweeping comments. This position largely is informed by the house-styles of publshing houses. While the editors of some journals prefer a four-move structure (i.e. Introduction, Methodology, Results/Discussion and Conclusion) to writing an RA, others allow writers to freely express themselves in as far as they meet their standards. Notwithstanding this editorial practice, it is not quite clear why Martin-Martin (2008) devotes seven pages of textual space in the Introduction unit of the paper. In the first three and half pages of the Introduction, the author gives a general background to his study and also aptly reivewed the extant literature, thereby stating the research gap. The next haf of the unit provides a classificatory framework for analysing hedging devices. The difficulty with this section is that it is overtly repetitive as it brings back issues already discussed in the introductory stages of the article. This difficulty in managing the rhetorical space, in a way, could negatively affect the processing of information being sought in the discussion.

Again, it is also not clear of what purpose serves the fourth unit labelled *GRADING OF HEDGES*. It appears the author by this unit seeks to present quite a different rendition of his analysis of data. However, we are aware that, quite apart from being unable to expressly articulate the author's position in this unit, this section is actually a part of unit three, that is, RESULTS OF THE ANALYSIS OF HEDGES.

One other limitation of the article is observed in the lengthy presentation of the conclusion of the work. Although the author's findings are well presented, they are none the less interspersed with the general confirmation/refutation ethos of discussing research findings, a practice commonplace in the Results and Discussion section of the RA. In effect, the concluding section of Martin-Martin (2008) appears like a re-reading of the analysis of his data.

3.2.2.2 Methodological Biases in the Work

In this strand of the discussion, I bring to light weaknesses concerning the sampling procedure employed by the author and the statistical approach he evinces.

The data collection procedure no less than its sampling method, to begin with, is affected by a degree of indeterminacy. Even though Martin-Martin (2008) specifies his sampling technique as being random, it is still doubtful how this randomisation was achieved. Further, that he explains this insufficiency of detail in the main body of the work later in a foot note does not exonerate him from the charge. “Due to constraints of space, I have not included here a list of references of the articles that make up the corpus of the analysis” (p. 150), he explains. But does this explication preclude him from at least showing in graphic terms the systematicity of the selection process? What was the total sample from which the texts were selected? The overall effect of this methodological inadequacy is that it leads the careful observer to conclusions of speculations.

Closely knit to the concern above is that Martin-Martin (2008)’s study largely is bereft of inter-coder reliability. To the extent that the work is more qualitative than statistical, its reliability should have been established. A chief reason is that qualitative research is “a very personal process because two researchers analysing a transcript will probably come out with different results” (Dawson, 2002: 128). It is against this difficulty that the author should have endeavoured to cross-check his analysis of the data with at least one other coder in order to resolve conflictual observations emanating from their respective analysis. Such an attempt reinforces the validity and strengths of research findings.

As well, the statistical tools used in the breakdown of the data are not so acute. A close look at the Results/Discussions section reveals that the author heavily draws on descriptive statistics. But according to Fraenkel and Wallen (2000), although this method is useful because of its relevance in clarifying data and its ablity to render data into forms which facilitate the comparison of disparate kinds of information, descriptive statisitcs, however, does not guarantee a test of significance. What this means is that the frequency count of the various strategies of mitigation could regrettably be spurious and statistically less accurate. For example, wherein lies the proof that indetermination as a mitigation strategy used in the Introduction unit of English data recorded the highest percentage, that is, 18.4% if it is not subjected to inferential statistics such the Analysis of Variance (i.e. ANOVA)?

My final concern deals with the author's use of exemplification and illustrations. Examples and illustrations in the analysis of data in the genre of RAs are key because not only do they provide evidence in the analysis, but more importantly they aid in understanding the concept(s) under discussion. Indeed, Martin-Martin's (2008) study is soaked in lots of illustrations from both his English and Spanish data. The problem, however, has to do with the travesty it shows as many are attempted to believe that the Spanish texts following the English examples are a translation of the latter. This also, therefore, means that the author does little to translate the Spanish illustrations into English, and so monolingual speakers of English know next to nothing about their communicative import. Again, little informaton is supplied in the fourth rhetorical section of the paper: GRADING OG HEDGES. Martin-Martin does little to provide textual evidence of what he calls *degree of protection* as found in Table 2 in his paper. Quite apart from the scanty delivery in this section, it lacks examples, thereby making it difficult for one to fully appreciate the locus of this unit.

4. CONCLUSION

In this paper I have critically examined Martin-Martin's (2008) work based on the principal axes of the strengths and weaknesses of the article. The work merits the attention of the research community on account of its clarity of thought, in-depth knowledge of mitigation and clearly articulated research findings which quintessentially enrich the literature on hedges. On the other hand, the paper could overcome such challenges as weak schematic structure, inderminacy in data collection procedure and poor statistical analysis. It should, however, be noted that much of these observations presented may have, none the less, been influeced by the editorial decisions of the journal in which the article appeared.

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