

Exploratory Study of Evaluative Techniques Used in Regional Development Literature Reviews

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Abstract

Recent interdisciplinary body of literature has witnessed the appearance of a significant number of studies dealing with the way in which researchers interact with their target audience. The proponents of genre analysis theory investigated extensively how authors express their attitudes towards other research and looked into evaluation processes involved in this process (Swales 1990; Hyland 1998; Thompson 2001) in various fields of study, including social sciences. Based on the analysis of five articles in regional development using content analysis, the study aimed to investigate how and by what rhetorical means researchers in the literature review sections of research articles express their attitudes towards previous research in their area. The results showed that authors express their views using meta-discourse used for hedging, boosting ideas and to express attitudes and develop personal stance.

Key words: literature review, content analysis, hedging, boosting

J.E.L. classification: I20, I21

1. Introduction

The nature of research communication has undergone a series of changes due to several factors: the advent of technology, development of disciplines and sub-discipline, development of interdisciplinary studies and high specialization of knowledge production. In the late 70s, academics started to write in a more engaging way as to cope with the increasing number of research topics and competition. Engaged writing reflected changes in the mentality and behaviors of a new generation of academics who entered into a more personal and interactional contact with the audience and readership they were addressing in their articles.

As Hyland (2005) points out in one of his most cited articles 'academic writing has gradually lost its traditional tag as an objective, faceless and impersonal form of discourse and come to be seen as a persuasive endeavor involving interaction between writers and readers'. To add more, the social constructivist approach reshaped the way authors not only produced knowledge but also interacted with it and finally delivered it to its readership. For instance, Charles Bazerman examines "how people using text create new realities of meaning, relation, and knowledge" (309).

One of the first outcomes of this change could be seen in the more evaluative research writing. Authors generally evaluate previous research in the introductions and literature review sections of their articles. The need to express evaluation in writing contributed to the development of a specific language, meta-discourse and rhetorical devices that are generally accepted by the communities of practice from different disciplines. It is closely linked to aims stated by different disciplines, for instance, social sciences are more interpretative and their discourse is more integrative and less abstract than that of natural sciences which are more abstract and argumentative.

For this study, we will retain the evaluative function of a literature review in order to investigate the expression of stance in the construction of writers' voice in establishing their own authority within a research community with which they enter into debates, create controversies or agree. Therefore, the aim we set for ourselves is to consolidate already existent knowledge on the use of stance by providing our own examples from the field of social science.

2. Literature Review

A survey of literature revealed a body of literature that emerged on the way researchers structure the introduction and literature review sections of their articles. A quantitative study by West (1980) just established that nominal clauses (e.g. Smith showed that) are more common in introductions than in other sections of articles. A study that contributed to seeing article introductions as problem solutions or examples of a top-down approach is that of Hepworth (1978). He claimed that article introductions provide a *generalized plot* in their structure.

More recently, literature reviews have been seen more as vehicles used to create interaction between authors and their audience. In a study conducted by Bondi and Mauranen (2003) defined evaluation as an *elusive concept*. For instance, Martin (2000) uses the term *appraisal* to refer to writer's judgements or opinions, whereas others prefer the concept of *meta-discourse* Hyland (1999). Meta-discourse is mainly language used to talk about discourse itself. Hyland (1999) defines meta-discourse as author's manifestation in the text and its main aim is that of communicating effectively with the target audience. Therefore, writers produce not only content, ideas and concepts but also a reflexive language to express their opinion on their content and also create interaction with the readership.

Social constructivists have been especially interested in the interactive nature of discourse as they view language as a means of engaging in social, cultural or ideological dialogue Bazerman (2005). Numerous typologies of evaluative resources in language have been designed to understand the social function of language in constructing interaction, such as, the most systematic typology developed by Martin in 2000.

There have been conducted several studies on evaluation, appraisal and stance that dealt with a variety of texts from the media, business reports and less from the academic contexts. The studies of Hyland (1999, 2005) discovered that authors are especially concerned with expressing probability and less feelings and emotions. He underlined the specific role of hedging and boosting in academic articles as these are used to support claims and prove the scientific nature of their work.

The concept of stance is especially important in understanding the positioning and adoption of a point of view in academic context. First, researchers have to prove to the target audience that they are experts in their area, so they engage in a dialogue with other researchers, theories and current debates and try to situate themselves in a specific context. Second, they build their own context trying to become also proponents of ideas by selecting, underlining or eliminating other researcher's work. As Hyland (2005) put it, they 'create a recognizable social world'. He introduces the idea of interpersonal negotiations and balancing of claims as to make them more plausible and credible within communities of practice and beyond them.

The dialogic nature of this type of interaction was first introduced by Bakhtin in 1986 in his book *The Dialogic Imagination: Four Essays*. Bakhtin talks about a larger intertextuality. Writers belong to a larger community of practice and anticipate the responses of this community and this is how they shape the dialogic interaction, the conversation that these engage into on their topic of expertise. Therefore, evaluation, assessment and stance are essential for creating a credible discourse within your academic context.

Stance is a term used by many researchers to refer to a textual voice. It expresses author's attitude and is conveyed through attitudes adopted by writers. Hyland (2005) discusses both stance and engagement and provides a description of their main features and markers. Stance is conveyed by means of hedges, boosters, attitude markers and self-mention, while engagement could be expressed by means of reader pronouns, directives, questions, shared knowledge and personal asides.

Therefore, the investigation of stance in literature reviews could shed light on the way stance is actually used by authors in specific contexts. The study will use the concepts of hedges, boosters, attitude markers and self-mention as they have been described and classified by Hyland (2005).

3. Methodology

Content analysis as a qualitative research technique has been widely used in analyzing discourse used in academic texts. Researchers regard content analysis as a flexible method for analyzing text data (Cavanagh, 1997). As in our case, there exists theory and prior research regarding the use of

stance and it would benefit from our investigation and maybe further completed and described, we chose to use the directed approach to content analysis. Levine-Donnerstein (1999) categorizes it as a deductive use of theory.

The study used categories developed by Ken Hyland as he has been the leading investigator in the field of academic writing and conducted studies regarding stance and engagement. We developed two main research questions: Do authors express their views in the text? What categories developed by Hyland (interactional metadiscourse typology – hedges, boosters, self-mention, attitude markers) are most widely used?

The sample was made up of 10 articles dealing with regional development and innovation downloaded from the websites of Inderscience open access journals. First, we selected the articles from publicly available database and extracted the following ten papers:

1. Darono, A. and Irawati, D. (2015) 'Service innovation in the complex environment of tax administration: the Indonesian public sector perspective', *Int. J. Innovation and Regional Development*, Vol. 6, No. 1, pp.102–123.
2. Viji, K.S.A. and Jayakumari, J. (2016) 'Modified region growing segmentation optimised with genetic algorithm for MRI brain images', *Int. J. Enterprise Network Management*, Vol. 7, No. 1, pp.55–69.
3. Sadek, T., Kleiman, R. and Loutfy, R. (2015) 'The role of technology transfer offices in growing new entrepreneurial ecosystems around mid-sized universities', *Int. J. Innovation and Regional Development*, Vol. 6, No. 1, pp.61–79.
4. Gust-Bardon, N.I. (2015) 'The structural and functional analysis of innovation systems: outline of the Polish case', *Int. J. Innovation and Regional Development*, Vol. 6, No. 1, pp.31–60.
5. Rodríguez, J.C. and Navarro-Chávez, C.L. (2015) 'A system dynamics model of science, technology and innovation policy to sustain regional innovation systems in emerging economies', *Int. J. Innovation and Regional Development*, Vol. 6, No. 1, pp.7–30.

Second, we extracted the introduction and literature review sections and performed a conceptual analysis. In our first reading, we focused on key-words associated with the expression of views and looked for words and word groups. Several key-words emerged, mainly adjectives *open*, *unclear*, *useful* and word groups, such as *this is a sign, it should be used*. Third, we grouped the key-words using grammatical categories, namely, parts of speech (nouns, pronouns, conjunctions, etc.)

In the third reading of the texts, we used the following pre-defined categories: existence or absence of hedges or boosters (yes/no), attitude markers (parts of speech, words, word groups), existence of absence of self-mention (personal pronoun, or possessive adjective).

4. Results and discussion

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4.1. Category 1 - Hedges or Boosters

Hedges and boosters are writer-oriented devices and clear evidence of author's presence. This device is used by authors to show commitment to their views. We found in all 5 texts key-words attached to this category. Article 1 dealing with service innovation in the public sector included a separate section entitled Literature Review, in which previous research is analyzed. The section is very elaborate and contains a report of several studies carried out from various perspectives: business, institutional. The writer uses hedges and boosters: (Category 1) *Amalia and Nugroho suggest a rather simpler categorization. Avgerou also focuses on a novel form of technology-mediated practice.*

One of the main functions of boosters is that of opening up a prevalent debate or view and the authors uses mostly to further define the dominant approach and to mention that studies are not

homogeneous. Claim made by authors should always be in line with dominant literature and these authors is quite reserved in using boosters. The authors are quite confident in making his claims. This could also be a sign of a more pro-active attitude towards literature.

Article 2 is also written by experts in computer science. It includes only an introduction, authors resuming just to few relevant studies and mostly presents them, and just one booster and no hedges were found.

(Category 1) *segmentation is one of the **most difficult** tasks....*

This booster appears in the first sentence; the other sentences just merely present the information without trying to amplify or reduce the claims the author is making. This could be due to the fact that the author is not trying to filter the literature and place the existing studies within a larger research context.

Article 3 deals with entrepreneurial ecosystems around mid-sized universities, it contains an extended literature review section. as extracted from the field of business communication and the author presents previous research in the literature review section. Boosters are used to suggest that TTOs (technology transfer offices) have been heavily studied by researchers.

(Category 1) *There have been **numerous** studies focusing on TTOs as units of analysis to examine the university commercialization ecosystem. Roberts and Malone proposed that two dimensions are **key** in analyzing spin-off policies. In typical traditional universities that do not have an existing entrepreneurial culture, these boundary-spinning organisations, which we refer to as intermediary organisations, play a **vital** role in the commercialization process.*

Article 4 is literaturere view of innovation systems, with a focus on Poland. The author shows a more extensive use of boosters, such highly, strong, key, etc. and also there are several hedges that may be a sign of a more interpretative approach. The author is not only engaging with other research but also places it within a larger context of innovation and management, both in terms of theory and practice.

(Category 1) *.... Interactions and cooperation networks are **key** forces determining regional development. **Too strong** relations between actors result in failure to notice external actors and ideas. Conversely, **too weak** relations diminish the ability to learn reciprocally and transfer knowledge (Schröter, 2009; Chaminade et al., 2012).*

It is evident that the author is more scholarly and is engaged in a more evaluative dialogue with the broader context of innovation and structural analysis, and does not just present the theory under discussion. The used of hedging is also a sign of maturity and his way of not making a strong claim in a highly dynamic and not yet highly recognized area by other experts.

Article 5 focuses on elements sustaining regional development systems, it includes a specific section entitled Literature Review. The authors are experts in this area of study therefore they use a lot of evaluative language, such as useful, increased, important to support their claim. The article is an empirical study, and the most consistent part is the presentation of systems dynamics models, constantly engaging in evaluating them throughout the paper.

(Category 1) *The concept of innovation systems has evolved as a **useful** tool to analyse economic development. The innovation systems perspective has taken an **increased** analytical importance in the technology field due to three factors (OECD, 1997). First, it recognizes the **importance** of knowledge to economic development. Second, the use of the systems approach is **increasingly** observed in the field of science and technology*

It is clear that the authors are quite sure of their claims, but they also dedicate much space to interacting with claims of the academic community at large. It also may be due to a more personal expert-like perspective that they undertake in their communication with the readership.

The fact that all five writers use boosters and less hedges may suggest that all of them use these devices in order to specifically open a discussion by amplifying the claims, theories and approaches that they are dealing with in their research. As less hedges were discovered, this device maybe less prevalent in the area as authors rely on a wide range of literature in order to support their claims or these authors avoided dealing with issues they do not support completely. Generally, hedges have been associated with the need of writers to involve readers as participants in their ratification, conveying deference, modesty or respect for the views of peers (Hyland, 2005). The analyses articles were written by experts that display to a lesser degree the need to hedge the ideas they debate with their audience.

4.2. Category 2 – Attitude Markers

It should be noted that *attitude markers* are more effective than epistemic. These are used by writers to express mostly agreement, importance, surprise, frustration and not commitment (Hyland, 2005). Authors generally display an assumption of shared values and these attitudes are signalled by devices, such as *adjectives, sentence adverbs, attitude verbs*. As Hyland puts it, writers both use these devices to express a position and pull readers into a conspiracy of agreement so that it is often difficult to disagree with their opinions.

Article 1 showed the use of word groups, adjectives, pronouns and coordinating conjunctions, such as *is beginning to be scrutinized, inconsistent, therefore, etc.* The author presents previous research in a brief section, therefore, we could infer that the attitude markers suggest mostly a positive attitude towards other studies and an engaged interaction with the readership.

Article 2 uses markers, such as *unclear, inaccurate*. This author expresses mostly an attitude of judging and fair appreciation of other research. It is an example of a reserved attitude which could suggest that the field of study is quite difficult to grasp and the author is mostly reserved in his evaluations.

Article 3 displays a wide range of conjunctive adverbs, such as *thus, consequently, however* that suggest a strong attitude of commitment to specific ideas and power of the author to interact greatly with the readership. The author also uses a wide range of adjectives and adverbs expressing an explicit attitude: *necessarily, specifically, open*.

Article 4 was written by an experienced educator, who uses a multitude of attitudinal devices: adjectives *natural, positive*, nouns *scaffold*, conjunctions *furthermore*, therefore he feels strongly about the topic and displays powerful commitment and uses devices to signal shared values with the audience.

Article 5 is also very attitudinal in the way the author utilizes adjectives *useful, critical*, conjunctive adverbs *because, as*. The author is a leading expert in the field and this could be the reason for her strong feelings displayed on the previous research and in her engaging tone.

It is evident that the authors use extensively markers of attitude in all the five articles under research, this validates Hyland's theory that attitude has been extensively used by authors by means of language devices in order to show commitment to certain theories or approaches.

4.3. Category 3 – Self-mention

This category refers mainly to the use of first person pronoun and possessive adjectives as it has been defined by Hyland (2005). These markers are specifically used to convey affective, interpersonal and propositional information. It is also an important feature of the writing process as suggested by Ivanić in 1998. He argues that authors always project an image of themselves and express their position in relation to their theories, readers, discipline. This is how they create their authorial identity. Typical sentences that appear in articles are: *I believe, I feel, I argue, etc.*

Out of five articles we used in our analysis, just one author used this marker. The author of the 5th article is a renowned expert and she used markers, such as *I, my use of the term, I show*. In the literature review, the authors use this marker to establish their authority and specify their ideology. They clearly demarcated her role in the research by the extensive use of the personal pronoun.

5. Conclusions

The study implemented a directed approach to content analysis using the pre-existing coding provided by Hyland's model on stance and engagement. The study started from the assumption that stance is used by writers to express views on previous research of other authors with a view of engaging into interactive dialogue with the readership. The results showed that authors of the analyzed articles used all three categories (hedges and boosters, attitude markers and self-mentions) in the introduction and literature review sections. The predominant use of boosters in all articles suggests that authors underline the importance of their topic by using this device several times and only one author made use of hedging to express his attitude towards an emerging area of study.

Regarding the use of attitudinal markers, all authors show confidence and express attitudes

towards other people's work by extensive use of adjectives, conjunctions, groups of words. More engaging and prescriptive is the author of Article 4. It could be explained by his background as an educator. It is evident that authors operate in a social context, within established communities of disciplinary practice and express their attitudes using appropriate language devices. Even though, Swales noted in 1990 that not all writers engage into interactive dialogues with their readership.

In conclusion, content analysis could be successfully employed by researchers to investigate how authors construct their personal stance in reviewing previous research. It is evident that researchers use a wide range of effective devices in this sense and successful authors need to understand and utilize them if they wish to develop an authoritative voice and engage into on-going debates within their disciplines. This study should be extended as the size of our sample was too small and more categories could emerge from direct analysis of language markers. Moreover, articles from different disciplines may bring even more interesting results in terms of choices made by authors in different disciplines related to regional development and innovation.

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