

INTERPERSONALITY IN RESEARCH ARTICLE ABSTRACTS: A DIACHRONIC CASE STUDY

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Abstract

Research article (RA) abstracts are not mere shortened versions of the research article content but constitute a separate genre of academic discourse with its own specific features, one of them being its interactional nature. This paper explores interactional metadiscourse markers occurring in RA abstracts from the diachronic perspective. The main focus is therefore on variation and change in the use of these linguistic means since it may be expected that their distribution could evolve over time, even though scholars follow specific writing conventions when writing RA abstracts. Connected with this is the question whether growth in the mean length of RA abstracts has led to any rhetorical change. Providing an answer to this question is another aim of this paper. The study is based on a corpus of 96 RA abstracts from the field of Applied Linguistics published in a prestigious linguistic journal entitled *Journal of Pragmatics* over the course of the last 35 years. The theoretical framework followed here is the taxonomy of metadiscourse proposed by Hyland (2005a), which is particularly convenient as it offers a pragmatically-grounded method of analysing interactional metadiscourse markers in academic texts. As the results suggest, the distribution of interactional metadiscourse markers has undergone diachronic changes, e.g. in the use of hedging and boosting devices, confirming the dynamic character of this often overlooked genre of academic discourse with regard to its interpersonal aspects.

Keywords

interpersonality, research article abstract, academic discourse, interactional metadiscourse markers

1 Introduction

The research article (RA) abstract has become an independent genre of academic discourse gaining significance with the growing production of academic texts and with the development of electronic journal databases. English has become the lingua franca of the academic community, which has “intensified cultural contact and possibly brought about new international standards in rhetoric and language use” (Bondi 2014: 243). Even though English is the leading language of science, some academic journals are also published in other languages. In this case it is very frequent that an English-written abstract is

required. This should guarantee, besides other things, that “the reported results of scientific work will circulate worldwide” (Ventola 1994: 333).

The rapid exchange of knowledge and information has resulted in large-scale publication of academic literature, which is accompanied by the development of abstracting practices since “abstracts have become essential elements of research communication by guiding readers in the difficult process of identifying the texts they are interested in” (Bondi 2014: 243). As a result, scholars have started to be interested in this previously neglected genre of academic discourse in order to understand what provides the basis of a rich variety of these texts connected, for instance, with a different length of abstracts, varied abstracting practices in various scientific fields, a different use of interactive and interactional resources, etc. Abstracts also vary in terms of functions they serve in a particular discipline.

The RA abstract is often considered “a factual summary of the much longer report, and is meant to give the reader an exact and concise knowledge of the full article” (Bhatia 1993: 78). This summarising function of the RA abstract has also been emphasised by Graetz (1985), Kaplan et al. (1994) or Ventola (1994). However, as Gillaerts and van de Velde (2010: 128) point out, there are other questions extensively discussed by scholars (Swales 1990, Ventola 1994, Hyland 2004, Bondi 2014, i.a.), for instance, whether the RA abstract expands the title of the paper, or whether it somehow indicates the content of the paper. The emphasis on the content and form of the original paper when defining the abstract is apparent in the description of The American National Standards Institute (ANSI), which states that the abstract is an “abbreviated, accurate representation of the contents of a document, preferably prepared by its author(s) for publication with it” (ANSI 1979: 1, as quoted in Bhatia 1993: 78).

What distinguishes the RA from the abstract is the purpose of the latter. The RA focuses on the formulation and dissemination of disciplinary knowledge whereby its authors aim to persuade the academic community of the validity of their claims. By contrast, the role of the RA abstract is to convince the reader to read the full text. “It is therefore a selective representation rather than an attempt to give the reader exact knowledge of an article’s content” (Hyland 2004: 64). The RA abstract emphasises the most important information and frames the article that follows; however, it is done in a way “as to encourage further examination and draw the reader into the more detailed exposition” (ibid.).

Another important aspect of RA abstracts is their promotional character, which is connected with greater competitiveness in academia. The abstract is usually the first encounter of the readers with the RA and at this point they decide whether to read the complete text, or whether the whole paper is not worth paying attention to (Pho 2008). Thus, “abstracts have become essential gatekeeping

and screening elements in academic and professional communication” (Bondi 2014: 244). Moreover, a correctly written abstract may convince a reviewer of the relevance of the research and the competence of the author and in this way it may increase the publication likelihood of a paper in an acclaimed journal. For this reason, academic authors aim to show that they have appropriate expertise to be competent members of the academic community. In other words, “to gain readers’ attention and persuade them to read on, writers need to demonstrate that they not only have something new and worthwhile to say, but that they also have the professional credibility to address their topic as an insider” (Hyland 2004: 63). This persuasion, Hyland continues, is achieved “with words that demonstrate legitimacy” (ibid.). It is a kind of “marketisation”, “a promotion of oneself and one’s paper through discursive means which might be considered analogous to the promotion of goods” (ibid.). Academic authors utilise discursive techniques parallel to those used in promotional culture which emphasise not only the relevance of their academic texts but also their professional identity. We can thus say that RA abstracts are “significant carriers of a discipline’s epistemological and social assumptions, and therefore a rich source of interactional features that allow us to see how individuals work to position themselves within their communities” (ibid.). When writing abstracts, academic authors therefore concentrate on both their interaction with readers and the construction of their academic identity within a particular discourse community.

The interpersonal aspect of the RA abstract has become obvious when the generic features of the abstract started to be defined in terms of interaction between participants who act in an institutional context, and not with regard to phraseology, specific lexis, and syntax. Therefore, scholars have started to examine interpersonal features of metadiscourse markers in academic prose.

Interpersonality in academic texts manifests itself in the use of hedging devices, boosters, engagement markers, evaluative expressions, and also with expressions signalling authorial presence (Lorés Sanz et al. 2010: 15). Interpersonality is therefore connected “with the ways speakers or writers project themselves into their discourse to signal their understandings of the material and their audience” (Hyland 2017: 19). The focus on the interpersonal dimension of academic texts is associated with “the impact that social constructionist theories have had on the way we perceive scientific texts” (Lorés Sanz et al. 2010: 15). Social construction theories have emphasised that “there is more to writing an RA than merely using words to represent an external objective piece of data. Reality is considered to be constructed socially, as nature has no language of her own in which she can speak to us [...], and therefore there is no secure means of distinguishing between objective observation and subjective inference” (ibid.). These claims imply that

readers are actively involved in interaction which is understood as the “writer’s rhetorical awareness of the reader as a participant in the discourse, as someone who, through the choice of metadiscourse devices, can be engaged, guided and swayed by a text that is both comprehensible and persuasive” (Hyland & Jiang 2018: 19). The interpersonal model of metadiscourse introduced by Hyland (2017: 20) offers “a dynamic and inclusive view [...] based on the idea that we monitor our production as we speak or write, often unconsciously, by making decisions about the kind of effects we are having on our listeners or readers. A finished text is an outcome of this awareness of the reader”.

Linguistic devices expressing interpersonality in RA abstracts, such as boosters, hedges, or self-mentions, are the main focus of research also in the present study. Nevertheless, they will be described from a diachronic perspective, not from a synchronic one, as is now more common (cf. Hyland & Jiang 2018). The reason is that the development of academic writing conventions “is important to our understanding of current practices; both in providing an awareness of how we got to where we are and in offering insights into the relationship between language and its contexts of use” (ibid.: 18). In concrete terms, the aim is to explore any changes in the use of interactional metadiscourse markers occurring in the last 35 years in the genre of RA abstract in a linguistics journal. Even though academic authors follow certain writing conventions when creating RA abstracts, changes in the distribution of interactional metadiscourse elements are expected. When compiling the corpus for the research, I found out that the particular subcorpora, even though consisting of 24 abstracts each, have gradually become longer. Recently published studies (e.g. Hyland 2004, Gillaerts & van de Velde 2010) have also confirmed this progressive lengthening of academic abstracts. However, it is not clear whether longer RA abstracts have become more informative or whether there is a more extensive use of metadiscourse. Another aim of the present study will be to answer this question.

Previous research into RA abstracts has focused predominantly on their rhetorical structure, e.g. Graetz (1985), Salager-Meyer (1990) or Lorés (2004), but linguistic features of RA abstracts have been neglected. Recent investigation devoted to the language of RA abstracts has revealed the occurrence of expressions of subjectivity, evaluation, and engagement in this genre (e.g. Stotesbury 2003, Hyland 2005b, Biber 2006). Since RA abstracts’ authors are aware of the readers’ evaluation of their texts, they pay special attention to “how they manage their interaction with the readers and how they construct their academic identity as competent members of the discourse community they address” (Lyda & Warchal 2014: 115). Furthermore, what is also typical of the linguistic development of RA abstracts is “an increasing foregrounding of metadiscursive references to

the article and to discourse procedures in main-clause position, with subjects denoting preferably discourse products and producers [...] rather than discourse objects” (Bondi 2014: 244). A general increase in the use of first-person markers in three different disciplines (linguistics, economics, and history), together with an increase in the use of illocution markers, evaluative adjectives, and modals has been revealed (Bondi 2014). From a textual and functional point of view, RA abstracts are regarded as “independent genres that may be embedded in a larger textual framework, i.e. a scientific article, but that might also appear on their own elsewhere to advance the contents of scientific articles and presentations” (Alonso-Almeida 2014: 22).

The present study will focus on one type of metadiscourse only, namely interactional, and will follow the classification of metadiscourse proposed by Hyland (2005a). It will be introduced in the next section. Section 3 describes the corpus of RA abstracts designed for this study and the methodology employed. Results are discussed in Sections 4 and 5, and conclusions are drawn in the final section.

2 Metadiscourse in academic writing

2.1 Defining metadiscourse

As already mentioned in the previous section, until recently academic discourse has been regarded as impersonal and detached. This perspective has gradually changed when more research into academic language has been carried out and academic texts have started to be perceived as a social engagement between the writer and the reader. Writers not only convey propositional meanings in their texts, but also express attitudes towards the propositional content and the readers. They organise their texts, negotiate meanings, and establish their credibility. To express all of these features, authors use various types of metadiscourse markers. From this it follows that these linguistic means are an inseparable part of academic texts and their appropriate employment makes an academic paper in academia more visible in ever-increasing competition.

Hyland (2005a: 37) defines metadiscourse as “the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community”. It is used as an umbrella term covering various cohesive devices and interpersonal expressions which “help relate a text to its context by assisting readers to connect, organise, and interpret material in a way preferred by the writer and with regard to the understandings and values of a particular discourse community” (Hyland & Tse 2004: 157). We can thus say that metadiscourse is

a functional category expressed by a variety of linguistic devices. As Hyland (2005a) points out, it is an open category to which new elements may be added, but the same expressions do not necessarily function as metadiscourse in all contexts.

Metadiscourse has been classified differently by different scholars. Vande Kopple's (1985) classification emphasises a clear-cut distinction between metadiscourse elements and the propositional content. He divides metadiscourse into *interpersonal* and *textual*. There are seven types of metadiscourse markers altogether: illocution markers, attitude markers, commentaries, text connectives, code glosses, validity markers, and narrators. Several years later, Crismore et al. (1993) altered Vande Kopple's (1985) classification and divided textual metadiscourse into *interpretive markers* and *textual markers*. The first category comprised certainty markers, hedges, attitude markers, attributors, and commentary. The problem with these classifications is that they do not sufficiently define what exactly is meant by the propositional content. Moreover, "it is sometimes difficult to distinguish what is content from what is not" (Hyland & Tse 2004: 160). It may also happen that propositional and metadiscourse markers occur in texts or even sentences simultaneously and therefore, such part of a text may have both functions. As pointed out by Hyland and Tse (*ibid.*: 161), "like propositional discourse, metadiscourse is able to convey the writer's intended meaning in a given situation; it is part of the message, not an entirely different one". It is then undesirable to distinguish between the propositional content and metadiscourse too sharply.

Hyland (1994) considered Crismore et al.'s (1993) classification of metadiscourse too strict in separating textual and interpersonal functions because of ruining the integrity of Halliday's tripartite concept of metafunctions. Consequently, Hyland (2005a: 48) proposed a model of metadiscourse, emphasising the interpersonal features of metadiscourse and "encompassing the interactional aspects of discourse, using the criteria of external and internal relations". It will be described in the next subsection in greater detail.

2.2 Hyland's model of metadiscourse

Hyland's classification of metadiscourse may be characterised as a functional approach regarding metadiscourse "as the ways writers refer to the text" (Hyland 2005a: 48). It emphasises the contextual specificity of metadiscourse and distinguishes between two categories of metadiscourse: *interactive* and *interactional*. The use of markers of interactive metadiscourse is connected with the organisation of discourse, i.e. with coherence of the text. The aim of the writer is therefore "to shape and constrain a text to meet the needs of particular

readers, setting out arguments so that they will recover the writer’s preferred interpretations and goals” (ibid.: 49). Interactional metadiscourse markers are employed to lead a dialogue with the reader. Utilising them, the writer comments on their argumentation, explicitly conveys their views, attitudes, and in this way involves readers “by allowing them to respond to the unfolding text” (ibid.). From this it follows that interactional metadiscourse is inherently evaluative, expressing consensus, “anticipating objections and responding to an imagined dialogue with others” (ibid.: 50). Both categories of metadiscourse are summarised in Table 1 below.

Interactive Metadiscourse	Transition markers
	Frame markers
	Endophoric markers
	Evidentials
	Code glosses
Interactional Metadiscourse	Hedges
	Boosters
	Attitude markers
	Self-mentions
	Engagement markers

Table 1: Hyland’s model of metadiscourse (2005a)

Since the aim of this study is interpersonality in RA abstracts, only interactional metadiscourse markers will be described in a more detailed way, accompanied by examples from the corpus. As evident from Hyland’s taxonomy described above, he defines five sub-categories of these markers:

Hedges withhold commitment to writer’s assertions and open space for dialogue in that they imply that a claim is made on the basis of writer’s subjective opinion rather than on specific knowledge. They indicate a degree of involvement with a proposition. To illustrate:

- (1) *It is shown that negation does not always serve to communicate politeness or mitigation in all speech acts, and in fact, **may** have the opposite effect.* [JoP, 1994, 21 (5)]

Boosters emphasise writer’s certainty with their claims and therefore close down the possibility of a dialogue. They indicate that the writer admits diverse perspectives, but at the same time they decided to reduce this diversity. They strengthen arguments of the writer; “the balance of hedges and boosters in a text thus indicates to what extent the writer is willing to entertain alternatives and so

plays an important role in conveying commitment to text content and respect for readers” (Hyland 2005a: 53). For instance:

- (2) *In particular, we investigate the following categories: Access, Space, Time, Discourse, Move, and Status.* [JoP, 2004, 36 (3)]

Attitude markers convey the writer’s affective attitude to their claims, i.e. importance, surprise, agreement, obligation, etc. An example from our corpus follows:

- (3) *We conclude that our methodology is fruitful for elucidating some problems concerning the relationship between thought and language within a communicative situation.* [JoP, 1984, 8 (3)]

Self-mentions indicate the degree of authorial presence in the text, which is signalled explicitly by the first person singular or plural pronouns and corresponding possessive adjectives, e.g.:

- (4) *In this article, we attempt to provide a semantically and pragmatically based explanation for this syntactic variation.* [JoP, 1989, 13 (5)]

Engagement markers “explicitly address readers, either to focus their attention or include them as discourse participants” (ibid.: 53). They do not appear in the corpus of RA abstracts since they are not typical of this genre.

In the following section, the corpus compiled for the present study of interactional metadiscourse markers, together with methodology employed will be described.

3 Material and method

3.1 Corpus compilation

The corpus designed for the purpose of the present study comprises 96 RA abstracts from the field of Applied Linguistics. They were excerpted from the prestigious linguistic journal *Journal of Pragmatics* published by Elsevier (12 issues per volume). It has a large international readership and high prestige in the field (impact factor 1.039 in 2018). Articles published in the journal cover a wide range of sub-disciplines of pragmatics, such as cognitive pragmatics, corpus pragmatics, historical pragmatics, multimodal pragmatics, theoretical pragmatics, etc. The journal “encourages work that uses attested language data to explore the *relationship* between pragmatics and neighbouring research areas” (<https://www.journals.elsevier.com/journal-of-pragmatics>), for example,

semantics, discourse analysis, conversation analysis, sociolinguistics, linguistic anthropology, psychology, and the philosophy of language.

It is also very convenient for our research purpose that abstracts have been an integral part of RAs in *Journal of Pragmatics* since the 1970s, which is not always the case with other Applied Linguistics journals. This is the reason why this journal was chosen as a suitable source of abstracts for the analysis. As each journal has, at least to some extent, its own instructions for authors and follows particular conventions from publishers, the focus of this investigation was on one journal only. Otherwise, it would not be possible to carry out an objective diachronic piece of research. For doing an objective investigation, it would be necessary to collect a much larger corpus of representative journals. This has also been confirmed by Okamura and Shaw (2014: 288), who state that “not only each discipline (Baklouti 2011) but in fact each journal has its own tradition and to some extent [...] its own prescriptions. Consequently unless a large sample of representative journals from a discipline is available (Bondi & Cavalieri 2012), a diachronic comparison can only really be made within the same journal, as Gillaerts and van de Velde (2010) did”.

Since the present study examines RA abstracts from the diachronic perspective, they were taken from different volumes of *Journal of Pragmatics* starting from 1984 up to 2019, covering the last 35 years. This time span was divided into four distinct periods: the 1980s, 1990s, 2000s, and 2010s. Within each period, abstracts from two randomly selected volumes with a 5-year interval between them were chosen (i.e. 1984 and 1989, 1994 and 1999, 2004 and 2009, 2014 and 2019). The result was 12 abstracts per one year, i.e. 24 abstracts per each period, i.e. 96 abstracts altogether. The complete corpus of abstracts totals 15,686 running words.

3.2 Method

In order to explore interactional metadiscourse markers appearing in RA abstracts, both quantitative and qualitative analyses were performed. Since these markers are very varied in nature and the context in which they occur is decisive for their classification, the corpus was tagged manually. The markers were categorised according to the group they belong to (boosters, hedges, attitude markers, or self-mentions). Then, the frequency of occurrence of each category of these expressions in the particular time span (the 1980s, 1990s, 2000s, and 2010s) was detected and calculated per 1,000 words, because each of these four sub-corpora was of a different length. Afterwards, carrying out a qualitative analysis was important for the interpretation of the findings of quantitative research.

At this point it is necessary to mention two important issues connected with approaches to metadiscourse and some problems associated with classification of particular language means, because both of these issues are significant for our methodology. The first one is related to approaches to metadiscourse. Drawing on Ädel and Mauranen (2010), Gillaerts (2014: 276) explains two different attitudes to metadiscourse: *thin* and *thick*. The thin approach “concentrates on all occurrences of a pre-defined list of metadiscourse categories and is quantitatively oriented”. This perspective is adopted, for instance, by Hyland, who works with inventories of metadiscourse markers in order to examine large language corpora. The thick approach is narrower and aims at “possible instances of metadiscourse in a given corpus and decides upon its metadiscursivity on the basis of an interpretation in the given context” (ibid.). This latter, qualitatively oriented approach is applied in the present study within the framework of Hyland’s (2005a) classification. It appropriately complements the quantitative analysis that is important for detecting changes in patterns of use of metadiscourse markers.

The other issue concerns the so-called *multifunctionality* (Hyland 2005b), which means that in some cases it is not possible to unequivocally determine whether a particular expression belongs to a particular category of metadiscourse markers or to the other. Since language categories generally are not always clear-cut, there is a certain overlap between them. Consider this example from the corpus:

- (5) *The present study aims to narrow this empirical gap by providing a discourse-analytic account of online trolling. **Specifically**, the study utilizes the notion of floor spaces to uncover how online users discursively orient themselves to trolling behavior and why such responses vary from one message thread to another. [JoP, 2019, 143]*

Here, the expression *specifically* may relate to the preceding sentence and determine the aim of the study more precisely, in which case it would be an instance of an interactive metadiscourse marker. Alternatively, it may emphasise the aim of the study as such. In this case it would be classified as a booster, an interactional metadiscourse marker. If the focus of this study were on both interactive and interactional metadiscourse, this occurrence of *specifically* would be included in both categories.

Another overlap occurred within one of the two main categories of metadiscourse, which were described above. In this case a particular expression was assigned to a subgroup that appeared more salient in the given context. A typical example of such a kind of overlap is that between boosters and attitude

markers. It was also observed by Gillaerts (2014: 281), who states that “if one overstates one’s attitude, one may label it as a booster”. To illustrate:

- (6) *These models differ radically from each other with respect to: 1. Their representational assumptions regarding the way knowledge is organized and represented in memory, and 2. Their interpretation principles, namely, the connectivity vs. diagnosticity principles.* [JoP, 1999, 31 (12)]

In this case, the expression *radically* was determined as a booster, but in other contexts it may be regarded as an attitude marker. Now, let us proceed to the results of the quantitative analysis.

4 Results and discussion

4.1 Length of the abstracts

An interesting feature, also relevant for this analysis, is the average length of abstracts, which is not constant in the monitored time periods. This characteristic may be considered one of the signals that the genre of RA abstract has been evolving over time. However, what should be emphasised at this point is that the maximum length of the abstract may be specified in the style sheet of a particular journal.

Table 2 shows the number of words in each of the examined periods and the mean length of abstracts. We can see that even though the same number of abstracts was analysed (24) in each decade, the number of words has gradually risen and depending on that also the mean length of abstracts. It must be pointed out that the length of particular abstracts may sometimes vary substantially. For instance, an RA abstract published in the 1990s consists of two sentences only:

- (7) *This paper deals with nothing less than the question: Who owns the English language?* [JoP, 1989, 13 (6)]

This abstract contains mere 14 words. On the contrary, some abstracts in the corpus stretch over three paragraphs and comprise over 350 words, and the longest abstract in the corpus contains 511 words.

Time span	Number of words in the particular decade	Mean length of the RA abstracts
1980s	3.306	137.75
1990s	3.485	145.21
2000s	4.391	182.96
2010s	4.504	187.67

Table 2: Mean length of the RA abstracts

On the basis of the findings concerning the length of abstracts, another aim of the present study started to be followed, namely what is the cause of this gradual lengthening of RA abstracts. Whether authors of RA abstracts focus more on conveying factual information or whether they employ metadiscourse markers more frequently. This question will be answered in the following sections.

4.2 Results of the diachronic analysis of interactional metadiscourse

Table 3 below summarises the results of the diachronic analysis of interactional metadiscourse markers occurring in the examined RA abstracts. It is important to emphasise again that the research is based on an analysis of RA abstracts from a single journal. It is therefore not possible to generalise the results to the whole field of Applied Linguistics, but it is more objective to understand them as certain tendencies only. From the figures it is clear that the employment of interactional metadiscourse markers in Applied Linguistics RA abstracts has decreased significantly in the course of time. This is apparent especially in the case of hedges and boosters, which are, in spite of that, the most frequent interactional markers in the corpus. Generally, the difference between these two categories is not so striking, but certain variation exists in particular time periods. Attitude markers and self-mentions occur less frequently compared to hedges and boosters. Now let us examine the four categories of interactional metadiscourse markers more closely.

Time span	Hedges	Boosters	Attitude markers	Self-mentions
1980s	15.43	13.91	6.96	6.96
1990s	13.77	11.48	5.45	4.30
2000s	9.57	9.79	3.87	8.65
2010s	7.77	6.66	6.88	4.66

Table 3: Interactional metadiscourse from a diachronic perspective (frequency per 1,000 words)

4.2.1 Hedges

As regards the distribution of hedges in the examined time periods, a sharp decrease in their incidence may be observed, compared to the first and the last periods. The most striking difference may be noticed between the 1990s and 2000s. In the 1980s the authors of linguistic RA abstracts conveyed new information more tentatively. Employing hedges means weakening the propositional content of knowledge claims, which is connected with reducing the degree of certainty and reliability for authorial statements, as, for instance, in (8) below.

- (8) *Other findings are that epistemic modality markers ('certain', 'uncertain', etc.) are **rather** infrequent, both in the plans and in the actual utterances. [JoP, 1984, 8 (3)]*
- (9) *In the subsequent discussion it is argued that the contextual conditions which produce the use of well with snooker commentaries **may** be seen to share some similarities with its use in everyday conversational discourse. [JoP, 1994, 22 (5)]*

Hedging may also be connected with authorial modesty and expressing distance from author's assertions:

- (10) *Sarcasm and mocking **seem to** signal negative affect, but even these aggressive forms of joking reframe the interaction as play like the other joking strategies, so they end up conveying solidarity and modulating involvement, especially among conversationalists who maintain a customary joking relationship. [JoP, 1994, 22, (3-4)]*
- (11) *The superficial counterexamples, however, **appear** to provide a first step toward a formal theory of rhetoric above the paragraph. [JoP, 1989, 13 (2)]*
- (12) *They are also distinctive in their repeated, **somewhat** formulaic use of greetings and signatures which did not appear in the apologies posted by ordinary Twitter members. [JoP, 2014, 62 (2)]*

Spreading information tentatively is an inherent part of an appropriate manner of expression in academic style. As Lafuente Millán (2008: 68) puts it: "It is generally accepted that members of academia cannot make categorical statements about their own hypotheses or findings. Quite on the contrary, they are expected to use hedges in order to "express tentativeness and possibility" (Hyland 1996: 433)". Using hedging devices, RA abstract authors may also distinguish between information they aim to present as a fact and information presented more as an opinion:

- (13) *The finding that any given message **can potentially** be treated as an attempt to troll is helpful in understanding the extent to which trolling should be viewed as deviant behavior. [JoP, 2019, 143 (4)]*

Furthermore, research in Applied Linguistics is influenced by contextual features, research results are more variable, and therefore, writers need more space for their interpretation, which is another reason for attenuating their knowledge claims. "In other words, by avoiding absolute statements the academic writer shows she is open to alternative interpretations. This way she protects her reputation as a scientist and smooths the progress towards its publication" (Lafuente Millán 2008: 68).

Hedging devices in my corpus of RA abstracts are expressed by the modal verbs *may*, *might*, and *can*, by the adjectives *possible*, *certain*, and *apparent*, by the verbs *appear* and *seem*, by the adverbs *possibly*, *likely*, *probably*, *relatively*, *potentially*, *rather*, *perhaps*, *supposedly*, *somewhat*, and *apparently*. However, the most frequent linguistic means used as hedges are modal verbs.

From the results of the quantitative analysis it follows that spreading new information, claims, or facts tentatively is of importance in RA abstracts. The acceptance or refusal of writer's claims hinges on the reader's appraisal of the reliability and persuasiveness of these knowledge claims and on reporting research results by the writer. We can say that hedges are means performing the function of convincing the reader of the credibility of the writer. The reason is that they weaken the level of certainty of a given statement. Hedging devices are means of interaction with readers since they create a dialogue between the writer and the reader by allowing them to share alternative views.

4.2.2 Boosters

Boosting devices also belong to a very frequent category compared to other interactional metadiscourse markers. Their distribution is slightly lower than that of hedges. We can also observe a gradual decrease in their occurrence in all four examined decades. Writers use boosters to lay emphasis on their assertions and to present their findings to the research community self-confidently and without hesitation in order to sound persuasive and certain (Examples 14 and 15). The overuse of boosters may result in sounding too authoritative, which is not the main aim of authors of RA abstracts.

- (14) *The paper proposes that discourse analysis **must** be directed towards textual structure rather than particular instances of realised text, and that it **must** recognise its own interpretive basis.* [JoP, 1989, 13 (3)]
- (15) *Arguments are presented which demonstrate that the notion of territory **does indeed** play a major role in the language.* [JoP, 1994, 21 (1)]

The RA abstract, apart from its summarising function, has an advertising function. This means that it serves as a means of attracting readers' attention to read the whole article (Examples 16 and 17). The author aims to put more emphasis on the focus of their research:

- (16) ***In particular** the problem of a metacommunicative re-interpretation of illocutionary markers and the problem of 'metacommunicative speech acts' will be discussed.* [JoP, 1984, 8 (4)]

- (17) *On the basis of examples from a multi-party encounter between four speakers of Swedish, cases of referring sequences are analyzed, especially those involving demonstrative expressions.* [JoP, 2009, 41 (2)]

Boosters indicate certainty and conviction with which RA abstract authors communicate their research findings (Example 18). As Hyland (2005a: 53) puts it, “boosters emphasise certainty and construct rapport by marking involvement with the topic and solidarity with an audience, taking a joint position against their voices”.

- (18) *A central notion developed here is speech act network, which is particularly suitable for the analysis of complex courtroom discourse consisting of interrelated illocutions and their corresponding perlocutions.* [JoP, 2009, 41(3)]

Boosters in our corpus of RA abstracts are expressed by the modal verbs *must* and its periphrastic form *have to*, adverbs such as *mainly*, *very*, *generally*, *widely*, *especially*, *particularly*, *broadly*, *extremely*, *indeed*, etc., and expressions like *in fact*, *in particular*, *in general*, etc.

4.2.3 Attitude markers

The distribution of attitude markers in RA abstracts in the examined time spans belongs to the lowest one in the corpus. In the 1980s their occurrence is, as in the other three categories of interactional markers, the highest. On the contrary, in the first decade of the 21st century, their distribution is by far the lowest compared to the incidence of the other interactional markers and also compared to the incidence of this marker in the particular time periods. This finding may be connected with a then conviction that academic style should be impersonal and expressing attitudes does not belong there. Academic writers in the field of Applied Linguistics prefer either attenuating or accentuating their knowledge claims or employing self-mentioning devices. They concentrate more on communicating factual information rather than on affective value.

However, we can notice a certain rise in the employment of attitude markers in the 2010s. This is connected with the fact that these expressions convey explicit opinions foregrounding academic authors, “create a research space and bring into being a linkage with the disciplinary community” (Khedri et al. 2015: 311). In addition, applied linguists attempt to communicate with readers and feel “at ease to express their subjectivity and feelings towards the proposition given” (ibid.).

Attitude markers explicitly indicate authorial judgements and exert greater impact, conveying either positive (Examples 19, 21, and 22) or negative evaluation (Example 20).

- (19) *My study demonstrates that diachronic speech act theory is a **useful** framework for a historical pragmaticist [...].* [JoP, 2009, 41 (3)]
- (20) *Since these distinctions are **hopelessly misleading**, a new set is proposed based on a different organization of knowledge.* [JoP, 1989, 13 (2)]
- (21) *This classification serves to illuminate the nature of the conundrum itself, while at the same time accounting for a variety of subtypes which **fertile** minds have invented.* [JoP, 1999, 31 (1)]
- (22) *The use of HHC-triads not only facilitates easy transitions for the advisors between activities in the consultation, it also **cleverly** combines the advisor's computer use and customer-centeredness.* [JoP, 2019, 150]

Attitude markers occurring in the corpus are realised by various adjectives or adverbs showing the author's affective attitudes explicitly and conveying a positive or negative viewpoint, e.g. *interesting, valuable, clear, useful, fruitful, crucial, correctly, persuasively, misleading, problematical, unclear, hopelessly, poorly*, etc.

4.2.4 Self-mentions

As apparent from Table 3 above, the distribution of this category of interactional markers is the most uneven compared to the other three types of metadiscourse elements. The highest occurrence is not, surprisingly, in the 1980s, but in the 2000s. This is connected with the development of academic discourse, when at that time academic writers foregrounded their identities in their texts explicitly and their style started to be more personal and not so detached as, for instance, in the 1990s, when the distribution of these markers is rather low.

As we can see, in the 2010s, self-mentioning devices do not appear very commonly. This fact may be surprising if we compare their incidence, for instance, in RAs (cf. Gillaerts & van de Velde 2010, Hyland & Jiang 2018), but it is important to realise that the RA abstract constitutes a different genre of academic discourse with a different function. RA abstracts serve the promotional function and focus on attracting readers' attention, which means that the distribution of metadiscourse markers differs here.

Authors utilise self-mentions in order to show their involvement and emphasise their stance and certainty about their propositions. They are an important means of interaction between the author and the discourse community they are part of. Self-mentioning devices help the author fulfil their role of researcher when they describe their research procedures (Example 23), or their role of the writer when they explain the structure of the paper (Example 24).

They also belong to an important and powerful strategy for highlighting an author’s contribution (Hyland 2001) (Example 25). Moreover, these devices help authors to ‘enter’ the text explicitly and reveal their authorial self. “The use of self-mentions strategically assists authors to maintain such authority by stating their convictions, accentuating their involvement to the field, and seeking credit for their contribution” (Khedri et al. 2015: 309).

Self-mentions are typically signalled by the employment of the first person personal pronouns *I* and *we*, and the corresponding possessive forms *my* and *our*.

- (23) *I then sketch an approach to context, based on the analysis of the behavioral organization of face-to-face interaction, which takes interactive territories and ‘embodiments’ (postural configurations) as its starting point. [JoP, 1984, 8 (1)]*
- (24) *As we are pursuing the question of women’s own style, we are finding out what it is that women do differently when they teach or when they interview, when they heal or when they joke. I would like to look at recent results on women’s strategies when they lead, and show that they fit into the set of conversational properties of women that have been identified, e.g. sharing of power, construction of equality, protection of face. [JoP, 1994, 22 (2)]*
- (25) *In the second part, basing my observations on the original sound recordings of the corpus data, I describe the intonation patterns of utterances containing, or consisting solely of, please. [JoP, 2004, 36 (9)]*

5 Interactional metadiscourse markers in particular periods

In this section I will summarise the occurrence of interactional metadiscourse in particular time spans (see Table 4).

Time span	Number of interactional metadiscourse markers (frequency per 1,000 words)
1980s	43.25
1990s	35.01
2000s	31.89
2010s	25.98

Table 4: Interactional metadiscourse markers in particular periods (frequency per 1,000 words)

In the 1980s the occurrence of interactional markers is with 43.25 tokens per 1,000 words by far the highest. To be more specific, hedges appear the most frequently (15.43 tokens per 1,000 words). They are followed by boosters with a slightly lower distribution (13.91 tokens per 1,000 words). The other two categories, attitude markers and self-mentions, appear at approximately half the frequency of occurrence of hedges and boosters (specifically 6.96 items

per 1,000 words). As we can observe, academic authors employ interactional metadiscourse markers very frequently in this period. It seems that when creating abstracts, authors followed their own rules and wrote them more freely than nowadays. The abstract from 1989 cited above may serve as a proof that at that time any strict rules of RA abstract writing were not set, as for the length, for example, and that it took some time for the abstract to be standardised. The cited abstract would probably not pass the review process nowadays.

Presenting their own perspective seems to be vital for academic authors in this period. By employing hedging devices, they signal that their statements are not categorical but open to discussion with the reader. However, in order not to sound too tentative or uncertain, authors employ boosters. As already mentioned above, the balance of hedges and boosters in a text is of significance when authors convey their commitment to the text and respect for readers. Attitude markers and self-mentions occur substantially less frequently in RA abstracts than hedges and boosters in this time span. However, they both belong to important categories of interactional metadiscourse. The incidence of self-mentions is somewhat surprising since explicit authorial presence was not frequent in academic texts at that time. It is more typical of later periods.

A gradual decrease in the use of interactional metadiscourse devices is apparent for the first time in the 1990s even though the mean length of RA abstracts was on the rise. Since the 1990s we can notice a gradual increase in the mean length of RA abstracts, which nevertheless does not mean that interactional metadiscourse is employed more frequently; right the opposite is true. These facts are the first signs of the preference of RA abstract authors give to conveying factual information, rather than to non-propositional meanings. Also, this change is of importance for a generic shift of abstracts. They do not longer belong to an “embedded genre” (Bhatia 2004) but to a self-contained, independent genre of academic discourse.

The beginning of the 21st century witnesses a major increase in the mean length of the RA abstract, and, at the same time, a further decrease in the use of interactional metadiscourse. In this period, the employment of hedges and boosters is the most balanced and there is a minimal difference between these two categories. The decline in the use of hedges in this period is the most striking, compared to their incidence in the previous time span. Attitude markers are also employed to a lesser extent in contrast to the preceding decade. However, the occurrence of self-mentions doubled. The reason is a generally more frequent, explicit presence of authors in academic texts, which is also apparent in other genres of academic discourse, for instance, in RAs. In this regard, academic

writing has gradually become more subjective. “Taking a credible personal stance is part of this rhetorical presentation of reasoning” (Hyland & Jiang 2018: 22).

The last decade examined for the occurrence of interactional metadiscourse markers was the 2010s. In this time span we can observe further lengthening of the abstract, even though not that striking when compared to the previous decade. Generally, interactional metadiscourse has decreased in the 2010s, but one category of interactional markers has increased, namely attitude markers. The reason is that the language of academic discourse is not so impersonal and detached as it used to be some time ago, and this feature manifests itself in RA abstracts as well.

6 Conclusion

This paper explored the concept of interpersonality in a genre of academic discourse, which previously did not attract much attention of linguists, namely the RA abstract. Recently, the situation has changed and many studies on RA abstracts have emerged, but the focus of these studies has been on a synchronic perspective only. This paper has adopted a different approach and has dealt with interpersonality in the RA abstract diachronically. Specifically, it has dealt with variation and change in the use of interactional metadiscourse markers.

Interactional metadiscourse focuses on strategies adopted by academic authors to communicate with readers, i.e. how they express their attitudes towards the reader, the text content, and the overall organisation of the text. When using metadiscourse markers, authors structure their texts more clearly and convey their ideas in a more reader-friendly way since these expressions are more personal. In other words, “by applying interpersonal-driven elements, [...] writers try to interact with readers, secure acceptance from audiences and signal their own truth-value opinions and voices about information given. The more interpersonal the nature of the metadiscourse markers mapped into a piece of text, the more the author meant to get these aims fulfilled” (Khedri et al. 2015: 308).

At the beginning of this research the assumption was that the distribution of these expressions had evolved over time, even though scholars follow specific writing conventions when writing RA abstracts. This hypothesis was confirmed since the distribution of the four examined interactional metadiscourse markers in the particular time spans changed. These diachronic changes are the proof of the dynamic character of the RA abstract. The employment of the two main categories of interactional metadiscourse markers, hedges and boosters, has been reduced substantially during the past 35 years, and their number is more balanced in recent RA abstracts. A high occurrence of hedges may be connected with the

fact that the credibility of academic authors in present-day academic discourse is enhanced by a careful expression of knowledge claims rather than by sounding too authoritative. Regarding attitude markers, their occurrence dropped in the 2000s, but then in the 2010s we can see their increase. This may be connected with the examined genre of academic discourse and its above-mentioned promotional character. A decrease in the use of self-mentions in the last decade suggests that authors of RA abstracts take a less personal position. Therefore, the overall reduction of interactional metadiscourse in RA abstracts is due to the decrease of hedges and boosters.

What has been observed in recently published studies on academic discourse is a gradual growth in the average length of RA abstracts. This was also confirmed by the present study and it brought us to the question whether this increase in the mean length of RA abstracts has led to any kind of rhetorical change. The answer is closely related to our first finding described above. Since there has been a significant decrease in the use of interactional metadiscourse in RA abstracts, we can claim that as a result they have become more informative. This is another proof of the “generic shift of RA abstracts. From an embedded genre, functionally and structurally placed in between the title and (the introduction of) the RA and as a rule to be read in combination with the full-text article, they are gradually changing into a stand-alone genre, often consulted on their own by scholars who want to assess the RA’s relevance for the field” (Gillaerts & van de Velde 2010: 136).

It is important to admit that the results of this study are limited. First, due to a rather small extent of the corpus, second, because of the fact that all RA abstracts were excerpted from one source only. Therefore, it is more suitable to regard this study as a case study, not as a corpus study. The above-mentioned results should be understood as certain tendencies only, which should be confirmed or disproved by a large-scale diachronic research. Moreover, interpersonal features can also be examined from other perspectives. The focus does not have to be only on the four interactional metadiscourse categories according to Hyland’s (2005a) classification. Despite these limitations I hope that this study could be taken as a starting point for future studies of the dynamics of academic discourse.

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