Concluding sections over 30 years of research writing: The case of a Polish scholar

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ABSTRACT

This paper offers an individual perspective on the evolution of genre standards by looking into a collection of texts published throughout 30 years of a research career by a scholar whose main field is applied psycholinguistics and whose main language of publication is English, her second language. The material is limited to concluding sections of English-language single-authored monograph chapters and journal articles published in the years 1990-2019, beginning with early, pre-doctoral publications, to full professorship contributions. The analysis focuses on the relative prominence of concluding moves and the changes in the use of first-person pronouns and epistemic markers in texts representing different stages of academic career. Apart from documenting the development of genre competence and the growth of the second language writer, the results may be indicative of an evolution of expectations towards the final text section and shed some light on the development of academic identity.

Keywords: academic writing, genre analysis, genre evolution, moves, academic identity, second language writing.

1. Introduction

Genre analysis, pioneered by Swales (1981, 1990) and developed by Bhatia (1993), has been applied to a variety of academic and occupational genres beyond the research article, such as lectures (Thompson 1994), conference presentations (Rowley-Jolivet – Carter-Thomas 2005), abstracts (Cross – Oppenheim 2006), research grant proposals (Connor – Mauranen 1999), corporate home pages (Luzón Marco 2002), and business letters of negotiation (Pinto dos Santos 2002). These studies have provided insights

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into rhetorical practices of various discourse communities, added to the understanding of specific goals accomplished through these practices, and offered teaching tools to help novice members to develop their competence in producing texts that are central for the community. Among these studies, diachronic analyses, aimed at identifying changes in rhetorical structures, have been comparatively rare.

One such attempt has been undertaken by Dressen-Hammouda (2008), who examines emerging genre competence in the context of disciplinary identity. She traces the early academic development of a geology student, from his third undergraduate year to the final stage of his PhD project, showing how his growing ability to identify and relate to his field's central concerns and to recognise disciplinary practices is reflected in the use of appropriate discoursal forms. Not much, however, is known about textual signals of academic development in longer time frames, from novice to expert community member. This paper offers an individual perspective on the development of genre competence in an extended time-frame by looking into a collection of academic texts published throughout 30 years of an active research career by a scholar whose main field is applied psycholinguistics, and whose main language of publication is English, her second language in terms of the order of acquisition. By focusing on selected aspects of text structure and rhetoric, it traces the development from a novice to an expert scholar and the growth of a second language academic writer.

The analysis is limited to concluding sections, text segments where English-language authors typically summarise main results, relate them to previous research, point out their significance, and identify their implications. While "there is no one 'correct' way to conclude" (Arnaudet – Barrett 1984: 88), concluding sections are usually expected to go beyond a simple restatement of the findings; rather, they are expected to situate them in a broader context and to make them relevant in view of previous studies and social needs (Hewings – Thaine 2012; Swales – Feak 2012; Wallace – Wray 2016). In other words, it is often at this stage that writers demonstrate that their research makes sense and what sense it makes. This turns conclusions into rhetorically complex and demanding sections. In view of that, it can be expected that the task of concluding will be approached differently by novice and experienced academic writers. This paper is an attempt to check these intuitions by looking into concluding sections produced at three different stages of the subject's academic career in order to establish whether there are any differences in the concluding moves taken by the author, the relative prominence of the moves, the expression of authorial presence, and the use

of epistemic markers modifying the degree of certainty, self-confidence, and authority that she invests in the text.

The next section provides the background for the study by discussing concluding sections and introducing the rhetorical model applied in the analysis. Section 3 introduces the methodology and describes the procedures. Section 4 presents the results of the analysis, followed by discussion and concluding remarks.

2. Concluding sections

Initiated by Swales in the early 1980s and originally applied to research article introductions, move analysis has since been used to examine the rhetorical structure of a variety of academic genres and their sections (see, e.g., Carter-Thomas – Rowley-Jolivet 2003, for conference presentations; Feng – Shi 2004, for research grant proposals; Lorés Sanz 2004, for research article abstracts; Shamsudin – Ebrahimi 2013, for lecture introductions; Bruce 2008, for methods sections of research articles). Among these text segments, conclusions have received less attention, but important contributions have been made by, among others, Hopkins and Dudley-Evans (1988), Swales (1990), Dudley-Evans (1994), and Yang and Allison (2003). All these studies explicitly or implicitly point to the delimitation problems: conclusions often combine discussion, closing remarks, and teaching implications, all of which may have the status of separate text sections that follow the presentation of results.

Hopkins and Dudley-Evans (1988) identify eleven moves that tend to recur in sections following results in articles and dissertations in the field of biology and agricultural engineering, the most prominent being Statement of results, Reference to previous research, Explanation (of the observed differences or unexpected results), Exemplification (in support of the proposed explanation), Deduction and Hypothesis (both aiming at generalisation), and Recommendation (with suggestions for future work), a list later extended with Limitation (on the findings, methodology, or applicability of the results; Dudley-Evans 1994: 225). This model, with some modifications, was later successfully applied to other disciplines (Holmes 1997) and to the native/non-native speaker distinction (Peacock 2002).[1]

[1] More recently, discussion / concluding sections of research articles have also been analysed in terms of promotional steps taken by authors writing in English and in Spanish (Moreno 2021) and in terms of linguistic variation across disciplines (Liu – Xiao 2022).

Commenting on the existing research on discussion sections, Swales (1990: 172) points to their well-attested cyclic nature: compared to introductions, sections that follow results are rarely "chunked"; rather, the moves tend to form recurring patterns, often depending on the predictability of the results or their compatibility with previous findings. Swales observes that, generally, the cycles proceed from tangible results to their broad context and real-world significance. Thus, the final organisation of concluding sections will to a large extent depend on how authors situate their findings among other research, how far they are prepared to move beyond the results and hypothesise on their possible implications, and how broadly they define their research interests. This suggests that the rhetorical structure of sections that follow results is likely to evolve with the academic development of the author, evolution which may be more noticeable here than in sections that do not rely so heavily on the contextualisation of research findings and the awareness of others' needs and disciplinary challenges.

The delimitation problems involved in concluding sections are perhaps most explicitly addressed in Yang and Allison (2003). Focusing on research articles in applied linguistics, the authors remark that discussion and conclusions may form a single text section (variously headed), or appear as distinct units in the same text, sometimes followed by separate pedagogic implications. Table 1 presents the moves and steps they identify in sections that follow results. Moves 1-4 have not been attested in conclusions if these follow discussion as a separate text section.

Table 1. Moves and steps in sections that follow results according to Yang and Allison (2003)

Moves	Steps
Move 1 Background information	
Move 2 Reporting results	
Move 3 Summarizing results	
Move 4 Commenting on results	Interpreting results Comparing results with literature Accounting for results Evaluating results
Move 5 Summarizing the study	
Move 6 Evaluating the study	Indicating limitations Indicating significance/advantage Evaluating methodology

Move 7 Deductions from the research	Making suggestions Recommending further research Drawing pedagogic implications

Apart from providing insights into specific communicative goals of concluding sections in the field of applied linguistics, the framework proposed by Yang and Allison (2003) has proved useful in comparative analyses of texts by Anglophone and EAL (English as an Additional Language) scholars. For example, Rañosa Madrunio (2012) analysed research papers prepared by graduate students of the English programme at a Manila university and found out that their conclusions typically included Summarising results but omitted Evaluating the study, a move that occurred quite regularly in Yang and Allison's data. The model was also used in Kashiha (2015), a comparative study of the distribution of lexical bundles across concluding moves in English-language applied linguistics articles by Anglophone and Iranian writers. The author shows that Iranian scholars tend to rely on a smaller set of bundles which they use repeatedly in various moves and steps. By contrast, lexical bundles used by Anglophone authors often occur only in one move or step; thus, they more closely correspond to a specific communicative goal. Kashiha notes that a possible reason for this less move-specific use of bundles by Iranian scholars may be a smaller range of vocabulary and convenience, as the writers rely on common and well-familiar phrases. It seems, though, that another explanation is also possible: in spite of following the prescribed move-and-step formula, non-Anglophone writers may be less aware of specific communicative goals accomplished through individual steps and hence use fewer structures that directly correspond to these goals (such as explicit references to current needs or conditional verb forms in Deductions from the research).

In contrast to previous studies on the rhetorical structure of concluding sections, this paper looks into texts produced by one scholar across thirty years of her publishing life. It aims to document the development of genre competence throughout her research and second-language writer career by analysing the move structure of concluding sections at various stages of her academic life. Additionally, it looks for possible changes in the degree of authorial presence and markers of epistemic commitment. As Kuo (1999) notes, references to the self reveal writers' perception of their relationship with the discipline and set the findings in a broader context of their research interests and previously obtained results, so the degree to which authors mark their presence in texts is likely to change with experience. Epistemic

markers, in turn, reflect authors' commitment to the truth of what is being said, different in reporting results and in making generalisations from the findings, recommendations, and predictions; they also reflect the author's authority, the awareness of the state of the art in the discipline, and the understanding of established patterns of interaction (Hyland 2005; Biber 2006). Thus, their use is also likely to change with the academic development of the writer. Concluding sections, which situate the results within previous research, show their significance, point out implications, and indicate possible lines of study, seem a promising text segment to study authorial presence and epistemic commitment.

3. Methodology

Looking into a set of concluding sections produced by the same author through the period of 30 years, this paper seeks answers to the following questions: Do the rhetorical structure of conclusions and relative prominence of particular moves change with the academic development of the scholar? Is authorial presence marked in different ways at different stages of her academic career? Is epistemic modality used differently at early and advanced stages of her academic development?

Throughout the paper, the terms concluding sections and conclusions are used interchangeably and understood broadly as sections that follow the presentation of results. In practice, this means that the term covers segments that can be identified as discussion and/or conclusions, an approach that seems justified in view of the fact that the two segments often overlap, with discussion taking over the role of concluding remarks and concluding remarks providing extended commentary. The fact that discussions and conclusions tend to overlap was also noted by Yang and Allison (2003), whose framework is used as the basis for move analysis in this study.

The approach taken in this paper is case study: the analysis focuses on an individual and the evolution of selected characteristics of texts she produced over an extended period of time; the observed differences are then interpreted in the context of her developing expertise as a researcher and her building confidence as a second language writer (Flyvbjerg 2011; Casanave 2015). It aims to provide some insight into how selected text features evolve together with the academic development of the author and add to the understanding of how growing awareness of the context (including existing research, the readers, and disciplinary conventions), expanding research

interests, and a growing sense of independence as a researcher are reflected in the rhetoric of concluding sections. Thus, it falls into the category of instrumental case study (Stake 2003), since it aims to better understand the rhetorical change that takes place in the process of development of academic identity (a process the present case illustrates) rather than to describe and understand the case itself "in all its particularity and ordinariness" (Stake 2003: 136).

The research method is text analysis supported by an unstructured interview with the author, a prolific writer, widely-cited researcher, respected mentor, and academic journal editor, whose main field is applied psycholinguistics, the first language Polish, and the main language of publication English, her second language in terms of the order of acquisition. Her first academic publication dates back to 1990. She obtained her PhD in 1993, post-doctoral degree (habilitation) in 2005, and full professorship in 2013. The interview was a preliminary interview conducted at the stage of corpus compilation (Rose et al. 2020). Its main goals were: to select texts for the analysis and check their accessibility (especially in the case of early texts); to discuss the division of the material into time-frames (while the stages are centred on academic degrees, a decision had to be made on the points of division); and to gather additional information about the author's academic development. In the last-mentioned case, the intention was to determine whether there had been any sharp turns in the author's academic career, such as a sudden change of academic discipline or area, attributable to other reasons than a natural evolution of research interests. No such events were identified.

The material for this study is limited to concluding sections of selected monograph chapters and journal articles (to the exclusion of monographs and the unpublished PhD thesis). It comprises 28 texts published in the years 1990-2019, all of them in English and single-authored, beginning with early, pre-doctoral publications, through post-doctoral degree texts, to full professorship contributions. The overall size of the corpus is about 18,000 running words.

The selection of texts was made after consultation with the author, the intention being to reach a compromise between two elements: the need to give fair treatment to all stages of her publishing life and the need to choose texts that the author herself considered as significant for her academic development. All texts were saved as text files, with figures, tables, fragments of interviews and think-aloud protocols, and more extensive examples in other languages than English removed. The corpus was then divided into three parts corresponding

to various stages of the academic career of the author: the novice stage (NS), the mature stage (MS), and the expert stage (ES). These time-frames are built around major academic achievements, that is, the PhD degree in 1993, post-doctoral degree in 2005, and full professorship in 2013; the points of division were discussed with the author. The final decisions regarding the corpus and the time-frames are shown in Table 2.

Table 2. The corpus

Stage	Time-frame	No of texts included (CH+JA)	Running words	Mean length	Shortest	Longest
Novice stage (NS)	1990-1996	4 (2+2)	1,880	470	87	725
Mature stage (MS)	2000-2009	9 (7+2)	4,580	508	84	771
Expert stage (ES)	2010-2019	15 (15+0)	11,480	766	223	1965
Total:	1990-2019	28 (24+4)	17,940			

CH – book chapters; JA – journal articles

As can be seen in Table 2, the three time-frames differ in length – the novice stage being shorter than the other two – and, most importantly, in the number of texts. Also, concluding sections in the expert stage are considerably longer than those in the earlier stages. These differences will necessarily limit the validity of the findings, but at the same time, they reflect the author's development as a writing scholar and anticipate some differences in the rhetorical organisation of texts.

The analysis was carried out with the help of QDA Miner 6. In the first part (rhetorical moves), the framework proposed by Yang and Allison (2003) was applied, but the system was slightly modified to accommodate text segments that combined the functions of text sections traditionally referred to as discussion and conclusions. Moves and steps attested in the corpus are shown in Table 3.

In the second part of the analysis (authorial presence), the focus was on first-person pronouns, self-citations, and other ways of referring to the self (such as *the present author* or *the writer*). In the third part (epistemic modality), searches were run using a list of words compiled on the basis of literature for a different study (Warchał 2015). An abbreviated version of the list is presented in Table 4. In the second and third part of the analysis, the search results were checked and cleared manually to eliminate accidental records. The results of the analysis are presented in the next section.

Table 3. Moves attested in the corpus (based on Yang & Allison, 2003)

Moves		Steps
Move 1	Summarising the study	1.1 Main problem/ goals/ hypotheses 1.2 Main results
Move 2	Commenting on results	2.1 Interpreting results 2.2 Comparing with literature (also invoking similar studies) 2.3 Accounting for results
Move 3	Evaluating the study	3.1 Indicating significance/ advantage 3.2 Indicating limitations 3.3 Evaluating methodology
Move 4	Deductions from the research	4.1 Recommending further research (also promising further research) 4.2 Drawing pedagogic implications

Table 4. Epistemic modality markers used as search words (Warchał 2015)

Modal value/ category of marker	High-value epistemic modality markers	Middle-value epistemic modality markers	Low-value epistemic modality markers
(quasi)modal verbs	be bound to, be going to, can't, couldn't, have (got) to, must, need (to), will	be supposed to, ought to, should, would	could, may, might
modal modifiers	by no means, certainly, definitely, doubtless, for certain, for sure, incontestably, incontrovertibly, indisputably, indubitably, on no account, no doubt, surely, unarguably, undeniably, undoubtedly, unquestionably, without (a shadow of a) doubt	arguably, in all likelihood, (most) likely, presumably, probably, supposedly	allegedly, conceivably, maybe, perhaps, possibly, purportedly

adjectives with a clausal complement	certain, convinced, impossible, inconceivable, not possible, sure, undeniable	(most) likely, plausible, probable	conceivable, doubtful, not likely, possible, uncertain, unlikely
nouns with a clausal complement	little doubt, no doubt	likelihood, feeling, impression	possibility, doubts
verbs of mental states and processes with a clausal complement		assume, believe, expect, imagine, presume, suppose, think, appear, seem	doubt, guess, speculate, suspect

4. Results

The first part of the analysis looked into the move-and-step structure of conclusions at different stages of the author's academic career. As can be seen in Table 5, different sets of rhetorical steps are characteristic of the novice stage and of the other two stages. The formula for early-career texts seems to be: [Main problem + Comparing with literature + Indicating significance + Recommending further research + Drawing pedagogic implications], while for the more advanced stages, it tends to follow the sequence: [Main results + Interpreting results + Comparing with literature + Drawing pedagogic implications]. Restating the main problem appears to be less important at the later stages, while the presentation of main results gains in importance, as does interpretation of the results. Comparing with literature and Drawing pedagogic implications seem to be relatively stable throughout the studied period of time, a feature that may be characteristic of this field of study or specific research area. However, Comparing with literature may play a slightly different role in the NS than in the more advanced stages. In the NS, it is not used to highlight, corroborate, or contextualise the findings, which are rarely restated in this set of texts, but seems to take place of the summary of results. Since in the material analysed the results are in line with previous research, a possible explanation for this use of literature may be the need to invoke the authority of more experienced researchers and in this way to gain credibility for the analysis. In all time-frames, Accounting for results, Evaluating methodology, and Indicating limitations seem to be of lesser importance.

Somewhat unexpectedly, Indicating significance, a move that may be thought to follow from the interpretation of the results, appears with a greater regularity in NS texts, where Interpreting results is rarely attested, than in the MS or ES, where Interpreting results occurs quite regularly. A possible explanation may be that in the early stage, Indicating significance tends to appear in place of interpretation rather than as its natural consequence; in other words, in the NS, the significance of the results seems to be announced rather than demonstrated to the reader. It is also worth noting that, perhaps surprisingly, the rhetorical structure of MS and ES texts is similar in spite of the fact that ES conclusions are markedly longer than MS concluding sections (see Table 2).

Table 5. Move occurrence in conclusions at different career stages[2]

Move/Step	NS		MS		ES	
	no of texts	%	no of texts	%	no of texts	%
1.1 Main problem/ goals/ hypotheses	2	50	3	33	4	27
1.2 Main results	1	25	7	78	11	73
2.1 Interpreting results	1	25	5	56	10	67
2.2 Comparing with literature	3	75	6	67	13	87
2.3 Accounting for results	1	25	3	33	1	7
3.1 Indicating significance/ advantage	3	75	2	22	6	40
3.2 Indicating limitations	1	25	3	33	1	7
3.3 Evaluating methodology	1	25	1	11	2	13
4.1 Recommending further research	3	75	3	33	6	40
4.2 Drawing pedagogic implications	2	50	4	44	8	53

The prominence of a rhetorical move was operationalised as the relative length of the text segment where the move was realised. Table 6 presents the results (expressed in the percentage of words) for texts belonging to a particular stage. Naturally, if the move occurs in a larger number of texts in a given time-frame, the percentage is expected to be higher; this can be seen, for instance, in Main results and Interpreting results, which are rare in the NS but quite common in the MS and ES. Still, text segments associated with Interpreting results tend to be considerably longer in the two later stages, as

[2] Numbers refer to the number of texts where a move was attested, also expressed as a percentage of the total number of texts in a given time-frame.

can be seen in Examples 1-3, which illustrate this move in the NS (Ex. 1) and in the MS and ES (Ex. 2 and 3, respectively).

It is interesting to note, however, that moves that tend to occur regularly in texts regardless of the career stage, such as Comparing with literature or Drawing pedagogic implications, may become more or less prominent in time. In the present case, Comparing with literature takes less text space in the MS and ES than in the NS, while Drawing pedagogic implications appears to be slightly on the rise. To illustrate, a text segment associated with Comparing with literature drawn from a NS text (Ex. 4) is markedly longer than corresponding text segments drawn from MS and ES texts (Ex. 5 and 6, respectively).

Table 6. Relative length of moves (in percentage of words) at different career stages

Move/Step	NS	MS	ES
1.1 Main problem/ goals/ hypotheses	3.7	3.6	3.7
1.2 Main results	9.2	20.3	23.4
2.1 Interpreting results	1.4	25.6	27.4
2.2 Comparing with literature	55.7	16.6	23.3
2.3 Accounting for results	4.3	6.4	0.9
3.1 Indicating significance/ advantage	4.9	3.2	4.6
3.2 Indicating limitations	2.1	2.6	0.2
3.3 Evaluating methodology	2.9	3	1
4.1 Recommending further research	6.5	7.1	3.3
4.2 Drawing pedagogic implications	9.3	11.6	12.2
Total	100	100	100

(1) So we can probably conclude that they came with the already mentioned, growing consciousness of how to learn as a result of individual learning experience.
(01-NS-1990-JA-C; Move 2 Commenting on results 2.1 Interpreting results; 25 words)

(2) It can be assumed that the reversed order of instruction may develop and facilitate meaningful learning, and thus bring about more positive learning outcomes. The main assumption of the meaningful learning is that success in learning depends on the ability to discover the relationships between ideas. This general definition when applied to this specific context will mean that conceptualisation will act as an

initial stage of the discovery of the link between something seemingly distant from the verbal expression, i.e. body with its physicality, and language itself. The three modes of learning distinguished by J. Bruner: enactive (manipulation), iconic (visualisation) and symbolic (abstract) are the best illustration of how conceptualisation can facilitate language learning by discovery through analysis and comparison. Another variable emphasised in meaningful learning is prior knowledge, i.e. knowledge of the world, here the familiarity of the feeling and the ability to describe ANGER as a phenomenon, and knowledge of one's mother tongue.
(08-MS-2002-CH-C; Move 2 Commenting on results 2.1 Interpreting results; 158 words)

(3) Comparing the questionnaire data and narrative data, it can be observed that the focus on learners´ responsibility for classroom climate is expressed strongly only in the former, emerging from the more structured way of expressing one's views that most questionnaires demand. When asked to reflect in an open reflective narrative, the subjects seem to focus almost entirely on the teachers as the creators and facilitators of classroom climate. This is also visible in the comments on their past positive and negative experiences of classroom climate at different levels of education, in which teachers are either blamed or praised for how they coped with or ignored the issues concerning classroom climate. What comes as a surprise is that the trainees, future FL teachers, do not appear to be aware of the role a foreign language itself can play in establishing a positive classroom climate. As a vehicle for communication, for instance, off-task interaction between the teacher and learners can be a factor contributing to the development of more individually-oriented contacts, and thus an individualized approach to learners.
(26-ES-2016-CH-C; Move 2 Commenting on results 2.1 Interpreting results; 179 words)

(4) Psycholinguistic investigations of the mental lexicon of bilinguals have produced contradictory results, some researchers advocating the existence of separate L1 and L2 lexicons, while others assume the existence of one lexical store for both L1 and L2. Albert and Obler, as quoted in Channell (1988), sum up the controversy: "It is clear that words in one language and their translation equivalents (when such exist) are related in the brain in a non-random way, much as a word

and its synonyms in the same language may be connected in an associational network". Numerous word-association tests in L1 have brought to light the links between lexical items, establishing various types such as synonymy, super-ordination and collocation. Since collocational links seem to be powerful and lasting, the research into L2 associations could be of value in the teaching of foreign-language collocations (see Author, forthcoming, for pilot results).
(02-NS-1992-CH-C; Move 2 Commenting on results 2.2 Comparing with literature; 148 words)

(5) In the case of L1 gesticulation, full automatisation and lack of awareness of the use of gestures was reported, which would indicate that just like the verbal part of the message, it is fully automated, or perhaps, as it was suggested by Krauss et al. (2000), the two processes, i.e. non-verbal language production and speech are inseparable, however, the model accounts only for the L1 messages, and may be different for L2 production.
(10-MS-2004-CH-C; Move 2 Commenting on results 2.2 Comparing with literature; 75words)

(6) As Moser (1999) puts it: "Like many other key concepts in psychological research, the self is a 'classical' research topic for metaphor analysis, because people can only speak metaphorically about the complex and abstract matter of the 'self'. Analyzing metaphors thus not only gives access to the tacit knowledge and mental models which shape the individual understanding of the self, but also to the cultural models provided by language to express individuality, self-concept and the 'inner world'." (Moser 1999: 144)
(28-ES-2017-CH-C; Move 2 Commenting on results 2.2 Comparing with literature; 82 words)

The first part of the analysis can be summed up in the following points: i) In terms of the occurrence of rhetorical moves, MS and ES conclusions appear quite similar; they differ from texts produced in the NS in the centrality of Main results and Interpreting results, both rare in the NS; ii) Comparing with literature, a step commonly attested in all three time-frames, seems to play a different role in NS than in the more advanced stages, since it often replaces Main results rather than helps to interpret them; and iii) Compared to MS and ES texts, conclusions produced in the NS tend to give more prominence to Comparing with literature. By contrast, Main

results and Interpreting results are the most prominent moves in the more advanced stages.

The second part of the analysis focused on authorial presence as expressed by personal pronouns, lexical references to the self, and self-citations. The results are presented in Table 7. Phrases such as *this author*, *the present author*, or *the author/the researcher* – referring to the writer herself – were not attested in the corpus. As can be seen from Table 7, the overall frequency of self-references in texts representing the three time-frames stays on a similar level, between 59 to 66 references per 10,000 words. The preferred type of expression changes only slightly, as can be seen in Table 8, which presents the relative frequency of particular self-referring expressions at different stages of academic career. While inclusive *we* is the most frequent choice at all stages (Ex. 7-9), first-person singular appears somewhat more frequent in the MS than in the other stages (Ex. 10-12). Also, self-citations are on the rise, which is to be expected in view of the growing output and consistency of the author's academic interests.

With regard to first-person singular, the most frequently attested functions in all time-frames are announcing or explaining the author's intentions – e.g., *I would like to draw some conclusions* (NS); *I would like to emphasize the significance of* (MS); and *In this article, I have tried to demonstrate* (ES) – and modifying epistemic commitment, as in *It seems to me that a psycholinguistic approach* (NS); *I think that it may be fairly safely assumed that* (MS); and *I believe that although based on very limited data* (ES). Direct references to research decisions or to the research context are rare and tend to appear in the more advanced stages, e.g., *the extent to which my data is in concord with* (MS) and *the subject in my study who* (ES). In the ES, self-citations sometimes concur with the use of first-person singular, as in *In my previous comparative study*; *As I observed in my previous studies*; and *In my earlier studies on culture-grounded concepts*.

Table 7. Self-referring expressions in conclusions at different career stages

Self-referring expression	NS	per 10,000 words	MS	per 10,000 words	ES	per 10,000 words
1 singular	2	11	9	20	15	13
1 plural inclusive	8	42	16	35	44	38
1 plural exclusive	0	0	2	4	0	0
Self-citation	1	5	3	7	14	12
Total	11	59	30	66	73	64

Table 8. Relative frequency of self-referring expressions (in percent) for different career stages

Self-referring expression	NS	MS	ES
1 singular	18.2	30	20.5
1 plural inclusive	72.7	53.3	60.3
1 plural exclusive	0	6.7	0
Self-citation	9.1	10	19.2
Total	100	100	100

(7) It is only one example of how this method can contribute to **our** knowledge of how learners process language (both their LI and L2).
(04-NS0-1995-JA-C; 1 person plural inclusive)

(8) If **we** relate both models directly to the issue of L2 grammar instruction, what clearly emerges is the need for both explicit and implicit teaching and learning (see Table 6)… The development of grammatical competence and its complexity derives from the complexity of grammar in **our** minds; thus learning becomes a complex process in need of support from various approaches which do not exclude but rather complement each other.
(13-MS2-2007-CH-C; 1 person plural inclusive)

(9) If **we** first of all consider the teacher to be an agent of change, **we** have to focus on his/her role as a facilitator expressed in the different dimensions of facilitation (Table 5).
(26-ES2-2016-CH-C; 1 person plural inclusive)

(10) Analysing the reports with respect to the strategies and techniques described by the learners **I** would like to draw some conclusions.
(01-NS0-1990-JA-C; 1 person singular)

(11) Tomiyama reports on the findings of various studies in L2 attrition and draws up a list of concluding statements deriving from them. **I** would like to compare the extent to which **my** data is in concord with the reported results by Tomiyama.
(09-MS1-2003-JA-C; 1 person singular)

(12) Generally, the perceptions of **my** subjects and those in Czekaj's study (2009) as highlighted above were fairly homogenous but not totally.
(16-ES1-2010-CH-C; 1 person singular)

With regard to epistemic modality, the focus of the third part of the analysis, there is a downward tendency in the use of the markers from 128 per 10,000 words in the NS (Ex. 13-14), through 111 in the MS (Ex. 15), to 57 in the ES (Ex. 16-18). The most rapid fall, however, occurs between the MS and ES and is primarily connected with low-value epistemic markers, whose frequency per 10,000 words fell from 69, through 55 to 18 in the ES (Table 9). When we look at the relative frequency of epistemic markers at different stages of academic career, shown in Table 10, it can be seen that low-value is the most frequently marked modality type in the first two stages while middle-value modality predominates in the ES. The relative importance of high-value modality seems to be increasing, but the differences are very small.

This downward trend in the numbers of epistemic markers is an unexpected result. Previous research has shown that epistemic modality is marked considerably more frequently in English research articles than in Polish-language articles, and that this difference holds for all three modal values, although it is more significant in low- and high-value markers than in middle values markers (Warchał 2015). It could be expected, then, that when writing in English, Polish writers would transfer their habits and intuitions from L1 and mark epistemic modality less often compared to Anglophone authors. Also, one would expect that – with the author's growing academic expertise as well as experience and confidence as an L2 writer – these preferences and intuitions would change in time, becoming more like those of Anglophone scholars (which would mean, in principle, more epistemic markers and a higher ratio of low- and high-value markers). In the present case, however, these expectations prove incorrect. To understand these findings, more research is needed into the use of epistemic markers by Polish scholars writing in English.

Table 9. Epistemic modality markers in conclusions at different career stages

Epistemic value	NS	per 10,000 words	MS	per 10,000 words	ES	per 10,000 words
High-value markers	2	11	7	15	10	9
Middle-value markers	9	48	19	41	35	30
Low-value markers	13	69	25	55	21	18
Total	24	128	51	111	66	57

Table 10. Relative frequency of epistemic modality markers (in percent) for different career stages

Epistemic value	NS	MS	ES
High-value epistemic markers	8.3	13.7	**15.2**
Middle-value epistemic markers	37.5	37.3	**53**
Low-value epistemic markers	54.2	49	31.8
Total	100	100	100

(13) Though the reason **may** be found in the fact that little or no instruction is given to learners in how to learn, i.e. how to make conscious use of certain language regularities (for example, use of affixes, inferencing or guessing meanings from the context).
(01-NS0-1990-JA-C; low-value EM [1]; Accounting for results)

(14) An understanding of the metaphorical nature of language **may** have implications for the acquisition of, for example, verb + noun collocations of the type to waste/spare time. Besides lexical phrases (collocations), metaphors **could probably** be used in teaching Pre" positions and phrasal verbs, especially so-called orientational metaphors which refer to the relation of our bodies to our surroundings.
(02-NS0-1992-CH-C; low-value EM [2], middle value EM [1]; Drawing pedagogic implications)

(15) In the context of LI, they clearly are inborn, intuitive, implicit and as if automatic. In the context of a FL it **will** be language exposure, for example the language instructor's input – his/her choice of modality, the type of didactic/non-didactic materials used…
(12-MS2-2006-JA-C; high-value EM [1]; Interpreting results)

(16) Literature on the subject does not comment at any significant length on the above discussed issues, **perhaps** with one exception of the issue of a seating arrangement and its significance for the effectiveness of different student groupings. The theme of classroom space and its individual dimensions as presented here **would** be worth a more in-depth research.
(16-ES1-2010-CH-C; low-value EM [1], middle value EM [1]; Recommending further research)

(17) It **can be assumed** that this relation shows the link between learning different languages in a sequence (and not simultaneously) and the

role the subjects attach to their prior experiences and their individual ways of approaching learning in the past.
(21-ES1-2013-CH-C; middle-value EM [1]; Interpreting results)

(18) These comments **seem** to express a rather traditional view, in which learners appear to be passive recipients of what is more or less imposed upon them.
(26-ES2-2016-CH-C; middle-value EM [1]; Interpreting results)

5. Discussion and concluding remarks

This paper looked into concluding sections of two academic genres, journal articles and book chapters, in an attempt to see whether the rhetorical organisation of the final sections evolved with the growing academic experience of the writer, whether the way of marking authorial presence changed in time, and whether the use of epistemic modality markers was different at different stages of the author's academic career. Considering the amount and type of data used for analysis, one should perhaps start with the constraints they impose on the interpretation of the results. Apart from the usual limitations inseparable from case studies, which focus on what is unique rather than what can be generalised (Casanave 2015; Rose et al. 2020), an important limiting factor is the necessarily unequal number of texts that represent different time-frames. The novice stage of early-career researchers is naturally shorter and, in many cases, less prolific than more advanced stages of the academic career. This is exactly the case in the present study. Although it reflects the dynamics of academic development, the limited number of NS texts may be a factor that distorts the results. Next, since the results come from a single-case study, they may be more useful in formulating questions for further research into the development of academic writers than in providing a set of strong conclusions.

The first important observation that emerges from this study is that in the ES, conclusions tend to be much longer than in the earlier stages. The length of sections that follow the presentation of results reflects the increased need to provide an in-depth interpretation of the findings – by pointing to possible reasons for or consequences of the studied problems or relationships – and to contextualise the results more thoroughly in the existing body of research by identifying these aspects in which they complement, contradict, or tally with previous studies.

Second, in spite of the difference in length, conclusions in the MS and ES are rhetorically similar, the core formula comprising the following moves/steps: Main results, Interpreting results, Comparing with literature, and Drawing pedagogic implications. By contrast, NS conclusions tend to focus on restating the problem rather than summarising the main results. Also, Interpreting results is a rare step in the NS; instead, much more space is devoted to Comparing with literature. The rhetorical similarity between the MS and ES texts, on the one hand, and the differences between these texts and the NS texts, on the other, very well reflect the two-fold distinction between novice and expert scholars, often applied in English for Academic Purposes research (e.g., Li – Flowerdew 2007; Dressen-Hammouda 2008; Rowley-Jolivet – Carter-Thomas 2014; Katsampoxaki – Hodgetts 2022). At the same, the results for all three stages confirm the importance of references to previous studies in linguistics research articles. In his interdisciplinary analysis, Peacock (2002) notes that this move is more often attested in Language and Linguistics than in other disciplines, approaching 90% of non-native speakers' texts. Although in the present case the percentage is lower (67-87%, depending on the stage), Comparing with literature is one of the two most frequently occurring moves in all three time-frames.

Interestingly, references to literature seem to play a somewhat different role in the NS than in the more advanced stages. In the NS, they often report others' findings which, in a sense, give credibility to the author's results presented in the preceding section. By contrast, in the MS and ES, they complement, support, or provide additional context for the results, which are discussed and interpreted in the same section. The use of sources in the NS – in place of the interpretation of the author's own findings – may reflect the reluctance to rely on one's own voice and budding expertise, which interpretation of results demands. These findings are not incompatible with Mansourizadeh and Ahmad (2011), an analysis of citation practices among expert and novice writers in the field of chemical engineering. While the authors note that expert writers tend to include more citations than novices, they point out that they do that for different reasons. Novice scholars cite mainly for attribution (i.e., to acknowledge the source of information), while expert writers do so to establish links with and between previous studies and to support their own claims or justify the findings. The tendency to combine citations with stance-taking in non-native speaker expert writers' texts (including distancing oneself from the original author's claim, conceding the cited claim, and expressing commitment to it) is also pointed out by

Rowley-Jolivet and Carter-Thomas (2014). Our data, although subjected to a different type of analysis, seem to reveal a similar pattern.

With regard to authorial presence as expressed by personal pronouns and self-citations at different career stages, the differences are small, with inclusive *we* being the most frequently applied self-referring pronoun in all time-frames. The only significant but expected change is the rise in the number of self-citations in the ES, a result of the author's long-standing academic interests, growing output, and increasing academic impact. It is worth noting that the preference for the plural first-person pronoun was also noted by Kuo (1999) in a corpus of journal articles from computer sciences, electronic engineering, and physics. In this case, however, exclusive *we* was the most frequent type, a difference that could perhaps be explained by disciplinary variation.[3]

Perhaps least expected are the results concerning epistemic modality. The frequency of epistemic markers was found to fall rapidly at the ES, which may be somewhat counterintuitive for two reasons. First, one would expect epistemic modality markers to concur with Interpreting results, a step that involves moving beyond reporting facts and that in our data was more often attested in MS and ES conclusions than in the NS.[4] Second, previous research has shown that Polish-language articles contain considerably fewer epistemic markers than do articles by Anglophone academic scholars (Warchał 2015), a difference that is a likely source of transfer to English as an L2. This may lead us to expect that at the later stages of the academic career, the author, by that time an experienced L2 researcher, would more often mark her epistemic stance than in the early texts. These expectations are not confirmed by the data. Interpreting these findings would require more research into the use of epistemic modality by novice and experienced academic writers.

Additionally, the analysis draws attention to the role of book chapters in the dissemination of results in the humanities and social sciences in the Polish context. Despite the current emphasis on journal articles, reflected in evaluation systems and various incentives for academic authors to publish in journals rather than contribute to multi-authored monographs, the latter have long been important venues for presenting research results in these

3 See also Wang et al. (2021), where exclusive *we* was found to dominate over the inclusive use of the pronoun in a corpus of articles from the field of electrical and electronic engineering.

4 See also Warchał (2023) for the occurrence of modality markers in specific rhetorical moves in conclusions to research articles.

fields of scholarship (see also Engels et al. 2018 for a discussion of the future of monographs and book chapters in the social sciences and humanities).

A single-case study would offer a very poor starting point for even cautious generalisations, yet generalisations are not the aim of this analysis. Rather, it is hoped that the findings may help identify some directions for future research on the process of developing academic identity and writing competence. A particularly interesting problem seems to be the evolution of epistemic modality marking in texts produced at various stages of academic career. Following Moreno (2021), it would also be interesting to look into promotional strategies employed by novice and experienced scholars. Still another promising direction would be the role of references to literature in interpreting one's own results, an aspect that seems to distinguish experts from novice writers. Also, the fact that conclusions produced in the novice stage are markedly different in their rhetorical structure from those produced at later stages offers additional support to the idea of writing accountability groups and other forms of writing facilitation as solutions that may help young academics build writer's confidence and develop as writers (Chu 2022).

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