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Scholarly discourse: The growth of English for Research Publication Purposes

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1 Introduction

The exponential growth of academic publishing in recent decades has been accompanied by an equally conspicuous scholarly interest in the subject. Starting from a position on the edge of English for Academic/Specific Purposes (EAP and ESP), an expanding body of research has sought to explain, describe and come to terms with the publicly available global outpouring of scholarly activity, much of which is in English. This work has grown into the sub-discipline of English for Research Publication Purposes (ERPP), now with its own research networks, journal, courses and textbooks. This is a field driven by the needs of countless scholars around the world who must now gain fluency in their particular domain of English to publish in international journals and advance in their careers. ERPP then, is guided by a commitment to language instruction for a very specific purpose. As Flowerdew and Habibe (2022: 2) have recently pointed out, ERPP is

concerned with the investigation of the nature and use of English in research and publication contexts and at the same time a field of practice focused on the needs of those who wish to publish in international journals.

Surprisingly, the emergence of this field has slipped under the radar of intellectual inquiry so while it is clearly related to EAP, its focus and growing importance deserve separate analyses. With its unique interest on the publishing process, together with the significant discourse demands and writer experiences this now has for postgraduate students and experienced academics alike, it justifies separate, detailed bibliometric analysis. We hope a better understanding of ERPP will both illuminate something of the complexities and

challenges of the field, but also contribute to the development of targeted interventions in the burgeoning writing for publication courses springing up around the world. In this paper, then, we seek to trace the emergence and growth of this field through published literature on the topic over the past 40 years (1982-2022).

Using a bibliometric approach, we seek to identify changes in the research themes, prominent journals, books, papers and authors of ERPP together with its geographical sources, and its citing fields. Specifically, we address these five questions:

- (1) What have been the most frequently explored themes and have these changed?
- (2) Which authors have been most influential and have these changed?
- (3) Which publications have been most influential and have these changed?
- (4) Which countries have been most productive in contributing to this research over the period and have these changed?
- (5) Which journals have published the most ERPP papers?

2 The growth of academic publishing

ERPP emerged from the rapid evolution of academic publishing in recent years and the consequential need for academics to gain control over the conventions of academic writing in English to participate in this endeavour. There is little doubt that the last 40 years have seen considerable changes in both research and publication practices in international English-medium arenas. Hyland and Jiang (2021) identify four main reasons for this: i) technological change, ii) Open Access business models, iii) an increase in active researchers, and iv) the importance of publishing to academic careers. As a result, there has been an explosion of journals, papers, doctoral dissertations and books with the globalisation of research and the encroaching demands of publishing metrics on scholars across the planet. We have seen the growth of collaboration and multiple authorship; the expansion of a massive online literature and the fragmentation and specialisation of research.

Most importantly, there are more journals, more researchers and more scholarly papers than ever before (Hyland, 2015). Some nine million scholars working in 17,000 universities seek to publish in English-language journals each year (Schneegans et al, 2021). UNESCO believes the number of researchers grew three times faster than the world population between 2014 and 2018 with research spending outpacing the global economy and publishing output up 21% over the same period. There are over 33,000 peer-reviewed English-language journals in the world publishing 3 million new peer reviewed articles (Johnson, Watkinson & Mabe, 2018). Astonishingly, one of the largest publishers, Elsevier, received over 2.7 million submissions in 2022, publishing over 600,000 articles after peer review with some 1.8 billion articles accessed¹.

For individual academics, the pressures have never been greater. One of the defining features of the modern academic scene is that publishing now drives research, rather than vice versa, as academics across the globe must now publish not only to present their ideas, but to increase their visibility and navigate their professional futures. The migration of publishing to online platforms and the retrospective digitisation of archived articles has enabled a culture which intensively audits the number of papers academics publish and the citations they receive (Hyland, 2015; Flowerdew & Habibe, 2022). Publication is now the system which both creates knowledge and distributes rewards to those who are most successful at it so that researchers find that their work has little value for them or their university without publication in the right places (Luo & Hyland, 2020; Hyland, 2023). If editors, referees, proposal assessors, conference participants, or journal readers regard a submission as original and significant, if it is published in prestigious places, and if it is cited and taken up by others in future papers, then the writer receives the reward of recognition (Habibie & Hyland, 2019; Li & Flowerdew, 2020).

¹ https://www.elsevier.com/_data/assets/pdf_file/0005/1095953/Fast-Facts2023.pdf

This deluge of publishing, fuelled by assessment regimes which count an academic's papers and citations, has generated a considerable literature in education and applied linguistics, especially in the field of EAP (Hyland & Jiang, 2021, 2022c).

3 Academic English research

The historical rise and spread of academic English across the globe have generated interest in various fields in the social sciences, particularly among discourse analysts and teachers of English working in higher education. The significance of academic English, in large part, lies in the fact that complex social activities like educating students, demonstrating learning, disseminating ideas and constructing knowledge, rely on language to accomplish. But academic discourse does more than enable universities to get on with teaching and research. As Hyland (2009: 1) observes, it also

constructs the social roles and relationships which create academics and students and which sustain the universities, the disciplines, and the creation of knowledge itself.

As Becher and Trowler (2001) put it, communication is 'the lifeblood of academia'.

Modern research into academic discourse, began in the mid-1960s with a British government funded study into the linguistic properties of scientific English, published by Huddleston in 1971. Since then, research on the topic has expanded to other fields and to include student and instructional discourses as well as research papers, blogs, book reviews and various electronic media (e.g. Chen & Hu, 2020; Hyland, 2022), and into spoken genres such as lectures, seminar presentations and 3-minute theses (e.g. Hyland & Zou, 2022). Research has also addressed the ways the conventions of academic writing differ across time discipline and genre (e.g., Hyland & Jiang, 2019).

This work has highlighted the importance of context on language choices, particularly genre and disciplinary context. Genres tend to represent an author's assessment of different audiences and purposes, meaning that material must be organised in different

ways. Similarly, writing as a member of a disciplinary group involves textualizing one's work as biology or applied linguistics, for example, and oneself as a biologist or applied linguist. As Foucault (1972) observed, there are disciplinary constraints on discourse which are both restrictive and authorizing, allowing one to create successful texts which display one's disciplinarity, or tacit knowledge of its expectations, for the practical purposes of communicating with peers. Ultimately the interpretation of some data or the expression of an idea is persuasive to the extent that academics recognize it as credible. It emerges from a disciplinary matrix in which published texts play a fundamental role.

As a result of these variations, research has sought to address rhetorical purposes as well as syntactic forms, in both writing and speech, and to incorporate ever larger samples of texts to do so. Much of this research therefore focuses on unpacking the communicative product rather than the event itself, seeing the text as representing, or constructing the event. Other work, largely influenced by a second major approach, is social constructivism, which has focused on the complex, situated nature of speaking and of writing for publication and how academics negotiate their roles and identities around the text (e.g. Luo & Hyland, 2020).

The esoteric nature of the specialised varieties of English required by students and academics, has meant that research has sought to inform educational practice, for both Anglophone scholars and those writing in an additional language. Following the lead of the established fields of EAP and language education, ERPP draws on broad theoretical foundations and the subject-matter expertise of its students (Flowerdew & Habibe, 2022; Hyland & Jiang, 2021). This commitment to research-based language education point to the increasingly diverse coverage of the field (e.g. Ding & Bruce, 2017; Hyland & Shaw, 2016). However, over time, the mission to uncover the constraints of academic contexts on language use has tended to overshadow a concern for pedagogic interests and the ways learners can be helped to gain control over these constraints. Therefore, it is important to

index the concerns of the field and what inform its knowledge base by tracking its historical development. We discuss the results after elaborating our methods.

4 Methodology

4.1 Approach

In order to trace the growth of scholarly interest in academic publishing in English we adopted a bibliometric approach, which Pritchard (1969, p.348) defines as “the application of mathematics and statistical methods’ to the analysis of academic publications”. This is a quantitative approach borrowed from library and information sciences to describe patterns of publication within a given field or body of literature. While taking different forms, the approach provides a quantitative account of publications, journals, and authors and is often used to characterise trends in the research practices of individual scholars and countries (e.g., Yu, Xu & Wang, et al., 2020).

Until recently, bibliometrics was employed in applied linguistics as a data-supported method to review the literature in a given area. For example, Lei and Liu (2019) analysed the most cited topics, authors and publications in 40 Social Science Citation Index (SSCI) applied linguistics journals between 2005-16, while Hyland and Jiang tracked the trajectory of English for Academic Purposes (2021a) and English for Specific Purposes (2021b) over the past 40 years. The method is also effective in exploring the literature on a given topic, so Hyland and Jiang have shown the changing themes and key publications in metadiscourse (2022a) and written interaction (2022b). In this paper, we follow this general line of research and hope to complement what others have discussed using more impressionistic methods (e.g., Li & Flowerdew, 2020).

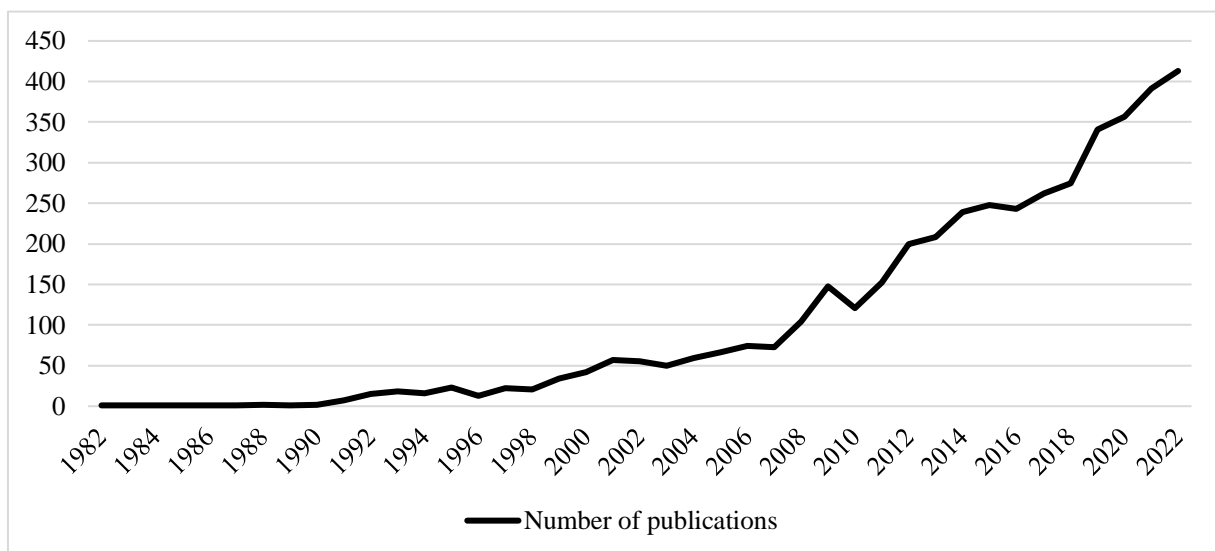
4.2 Data collection

We first created a corpus of journal articles as the basis of our study. We chose to focus on the 100 million papers from the Social Science Citation Indexed (SSCI) and Arts and Humanities (A&HCI) journals held on the Web of Science (WoS). We then created a robust list of search strings, finally deciding on the following combinations: “academic

publishing”, “scholarly publishing”, “English for publication purposes”, “English for research and publication purposes”, “ERPP” and “research publishing”. These all refer to writing for publications in international English-medium journals and papers not meeting this criterion were discarded.

We searched all the journals in the core collection of SSCI and A&HCI for the above strings, scanning titles, abstracts and keywords of research articles. The results from the Web of Science show the overwhelming predominance of three broad disciplinary categories, with linguistics journals comprising 48.7% of the total, followed by education at 25.5%, and communication at 22.8%. We therefore focused on these journals in our analysis. This returned 4,354 articles published between 1982 to 2022. Figure 1 shows the distribution of these papers over these 40 years, indicating a marked increase in the number of papers published on the subject, with a significant surge from around 2008 onwards. We therefore decided to trace changes before and after this date. There are 652 articles in the first period of 1982 to 2007 and 3,702 in the second from 2008 to 2022.

Figure 1 Distribution of the number of publications across time



4.3 Data analysis

We then interrogated these two corpora to answer the questions above, to discover:

- (1) The most frequently explored topics overall and in each period
- (2) The most cited authors overall and in each period

- (3) The most cited books, chapters and articles in the two periods
- (4) The most productive countries over the two periods
- (5) The most active journals with papers on academic publishing

To answer question 1, about topics, we did the following:

- 1) Annotated all the identified abstracts with part-of-speech using Schmid's (1995) *TreeTagger* programme.
- 2) Searched the tagged corpora to identify all nouns and n-grams of 2 to 5 words using *AntConc* (Anthony, 2022) for candidate topics.
- 3) Manually checked all remaining cases to exclude phrases which did not constitute research topics.

We focused exclusively on nouns in identifying potential subject areas as these are far more likely to constitute research topics than other parts of speech, while 2-5 word *n*-grams seemed a realistic range to capture topics such as *open access* (2-word gram) and *English as a foreign language* (5-word gram). Only those with the most specific semantic reference were included in case there were two or more terms referring to the same topic. We then discarded three main categories: a) words and clusters common in language in general (*the importance of* and *in research*), b) concepts and issues not specific to academic publishing (*approach to*, *significant difference*, *the study*), c) concepts and issues common in academic publishing but too general to be useful (e.g. *writing*, *the literature*) (see also Lei & Liu, 2019).

Lei and Liu (2019) and Hyland and Jiang (2020) set a threshold frequency of 30 occurrences for items to be included and showed this as sufficient to ensure the significance of the items but not too high as to exclude important topics. In the current study we trialled several threshold points and decided on a more conservative cut off point, including only topics which occurred at least 40 times per million words. To exclude an idiosyncratic preference for a topic, we also added a range criterion so that items had to occur in at least 5 articles. We then normalised the frequencies by representing the number

of occurrences of each topic per 100 papers to allow comparisons between time periods. Finally, we ran a two-way chi-square test for each of the identified topics across the two periods to determine statistical difference in the topic frequencies. Given the number of separate chi-square tests, Bonferroni correction (Holm, 1979) was used to adjust the alpha from .05 to .005 to avoid type I errors.

To address questions 2 and 3, concerning the most influential authors and publications, we first identified the most-cited authors in the references of the papers in each corpus using a frequency count. To find the most highly cited works, we computed the frequencies of all the publications (books, chapters, and articles) from the reference lists in the corpus, using a regular expression search to identify the abbreviated titles after having part-of-speech tagged the reference lists.

For *Question 4*, regarding the countries most productively publishing on academic publishing, we extracted the affiliation of every author of every paper in the corpus. To answer *question 5*, concerning the journals which have published most research on the topic, we drew on the *Web of Science* facility which reports the publication sources of the included papers.

5. Results and discussion

In this section we discuss our findings taking each research question in turn.

5.1 The most frequently studied themes

We understand themes to include both the issues explored and the means of exploring them, thus comprising both topics and methods. The criteria discussed above produced 287 frequently discussed themes related to academic publishing over the 40 years. Each period produced different items as the field expanded, with 46 dropping out in the second period, including *textbooks*, *testing*, *vocabulary*, *grammar*, and *language skills*. While failing to meet the criteria does not mean the theme disappeared entirely, this suggests

that the literature on academic publishing has become are less concerned with basic pedagogical and classroom practices than before.

More strikingly, 102 new topics emerged after 2008, including *open access*, *knowledge production*, *undergraduate students*, *scientific inquiry*, and *collaborative learning*.

These topics imply both the influence of new academic contexts on publishing and also a changing perception of the topic. *Open access* (OA) appears in the list due to its massive influence in recent years on review, access, and funding practices, as costs shift from readers to writers (or writers' university sponsors) (Hyland, 2023). More than 56% of all academic articles published in 2020 are said to have some form of open access, and this is increasing every year². There has also been a conceptual shift with publishing increasingly seen as a mechanism for *knowledge production* (Hyland, 2015) rather than the exercise of language skills or the pursuit of curiosity, with significantly strengthening connections to higher education and the professional development of teachers (Fitzpatrick et al, 2022; Hyland, 2023).

Table 1 shows the topics which statistically rose and fell overall, with raw and normed frequency for each period and the total number of papers the items occurred in. The themes are organised by their normed percentage change.

Table 1 The themes with the most dramatic changes in academic publishing

	1982-2007			2008-2022			% normed change	Chi-value	p
	raw	normed	range	raw	normed	range			
Significantly up									
higher education	7	1.1	5	185	5.0	86	365.5	15.2	0.00
systematic review	6	0.9	6	96	4.0	75	334.7	4.7	0.00
meta-analysis	10	1.5	8	182	6.3	103	310.8	10.6	0.00
professional development	7	1.1	7	162	4.4	106	307.6	12.0	0.00
literacy skills	6	0.9	5	121	3.3	52	255.2	7.9	0.00
case study	7	2.0	7	138	6.5	125	225.0	8.8	0.00

² <https://wordrated.com/open-access-publishing-statistics/#:~:text=Open%20access%20academic%20journals%20and,the%20academic%20article%20publishing%20market.>

teacher educators	8	1.2	5	125	3.4	53	175.2	5.9	0.00
Significantly down									
teaching	185	28.4	105	185	5.0	95	82.4	439.5	0.00
classroom	73	11.2	45	63	1.7	44	84.8	195.3	0.00
curriculum	73	11.2	47	63	1.7	41	84.8	195.3	0.00
intervention	69	10.6	28	59	1.6	28	84.9	185.9	0.00
second language acquisition	70	10.7	48	59	1.6	32	85.0	190.7	
course	31	4.8	17	19	0.5	14	89.6	104.3	0.00

It is clear that there has been a shift towards an interest in ways to effectively research academic English, with systematic review, meta-analysis and case study making the list, and in the professional development of teachers. The latter refers to the opportunities for in-service/practicing teachers to not only develop their classroom skills, but to affect *a change* in teacher understanding, knowledge and practices (Ur, 2019). Perhaps equally significantly there has been a significant movement away from more general language teaching topics and classroom issues. While this is a perhaps a reflection of academic English studies more generally (see Hyland & Jiang, 2021), it also reflects the expanding role for EAP teachers in Higher Education. The role of practitioners often goes beyond teaching to include the wider context of their profession, including researching literacy practices, understanding the needs of their students, and building connections with faculties (e.g. Davis, 2019; Hyland, 2023).

This does not mean that many of the established themes of ERPP have disappeared over the years or that they have been replaced by emerging models or ideas. Table 2 shows the perennially popular areas continue to attract massive attention and, indeed, form the spine of the literature in English for publishing.

Table 2 Themes with constant high frequency in academic publishing over the periods

	1982-2007			2008-2022			% normed change	Chi-value	p
	raw	normed	range	raw	normed	range			
Constant									
corpus	55	8.5	43	322	8.7	301	2.4	0.8	0.4
graduate students	47	7.2	45	274	7.4	253	2.8	0.6	0.4
discourse	62	9.5	54	366	9.9	337	4.2	0.6	0.4

genre	55	8.4	49	326	8.8	279	4.8	0.5	0.5
research design	40	6.2	40	241	6.5	238	4.8	0.4	0.5

Discourse, genre, corpus and graduate students all have high normed frequencies and range across papers in both periods. Genre analysis, following Swales seminal 1990 book, has provided researchers with a rich seam of information about academic texts. This is a way of studying discourse as “communicative events which are associated with particular settings and which have recognised structures and communicative functions” (Flowerdew, 2002, p. 183). The importance of research design also remains a constant theme in the ERPP research, with 215 occurrences in the more recent period as the diversity of research methods expands (see Table 1).

5.2 Most cited authors

This evolution towards a distinctive disciplinary character can also be seen in the field’s most influential authors. To identify these we conducted a frequency count of the reference lists in our corpus of 4,354 research articles, divided them into the two time periods, and normalised the results to 100 papers. Table 3 lists the top 15 authors in each period, together with their raw and normalised citation counts.

Table 3 Most highly cited authors across the two periods

1982-2007			2008-2022		
Authors	raw	normed	Authors	raw	normed
John Swales	147	22.5	Ken Hyland	822	22.2
Ken Hyland	114	17.5	John Swales	373	10.1
John Flowerdew	64	9.8	Douglas Biber	294	7.9
M.A.K. Halliday	63	9.7	John Flowerdew	269	7.3
Ann Johns	48	7.4	Theresa Lillis	240	6.5
Pierre Bourdieu	46	7.1	Yongyan Li	215	5.8
Charles Bazerman	45	6.9	Pierre Bourdieu	207	5.6
Greg Myers	45	6.9	M.A.K. Halliday	192	5.2
Carol Berkenkotter	40	6.1	Lev Vygotsky	186	5.0
Douglas Biber	40	6.1	Suresh Canagarajah	172	4.6
Vijay Bhatia	38	5.8	Albert Bandura	152	4.1
George Lakoff	28	4.3	Diana Belcher	110	3.0
James Paul Gee	26	4.0	Jane Lave	105	2.8
Rod Ellis	26	4.0	Marry Jane Curry	104	2.8

Tony Dudley-Evans	21	3.2	Zoltán Dörnyei	100	2.7
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It is interesting to note that both lists are dominated by the same names. Swales, Hyland, Halliday and Flowerdew occupy the most cited slots while Biber and Bourdieu also occur in both periods. The enduring influence of Swales, Hyland and Flowerdew is due to their work on written academic genres, the first two in seeking to model the structure and meaning of published academic texts and Flowerdew for his work on championing critical approaches and the struggles of non-native English speaking academics. Michael Halliday, of course, is known for his influential systemic functional model of grammar, which is widely used by analysts of published academic writing to assist understanding of the ways language is used to create meaning, construct knowledge, and persuade others. Both Halliday and Biber have also published analyses of academic writing, the former often focusing on scientific discourse and the latter on the corpus analysis of both academic and non-academic texts. Pierre Bourdieu also appears in both lists, testifying to the importance of social theory in gaining an understanding of the published discourses of the academy, offering a theoretical means of conceptualising how language choices are circumscribed because of structural constraints and unequal access to institutional resources.

The remaining names occur in one list only. In the earlier period we find Bazerman, Myers, Berkenkotter and Bhatia, each responsible, in different ways, for establishing the importance and understanding of academic texts. Ann Johns, also a strong genre advocate, is best known as an academic writing specialist and for the view that learners acquire literacy in particular social contexts through exposure to the genres used in those contexts. Lakoff is a cognitive linguist influential in numerous academic disciplines as a result of his view that we are significantly influenced by the conceptual metaphors we use to explain complex phenomena, thus providing a base for those seeking to map the importance of how linguistic constructions frame understandings. Like the genre theorists, James Gee sees language as always occurring within a context, stressing its relationship with other social practices such as behaviour and ways of thinking within a group. His idea of discourse communities has been influential in discussions of disciplinary communication. Finally, Rod Ellis and Tony Dudley-Evans are

applied linguists working in language description and education, Ellis with tasks and Dudley-Evans with English for Specific Purposes.

In the later list, the highly cited authors mentioned in the previous paragraph are replaced by writers often more directly associated with English for academic research. Theresa Lillis, often writing with Mary Jane Curry, is responsible for a series of publications which unpack the politics of access, production and participation in academic publishing. In particular this involves using ethnographic methods to understand the publishing experiences of writers, especially those working in a context where English is a foreign language. Yongyan Li also focuses on the writing of L2 students, mainly those working in China, while Suresh Canajarah has focused on the struggles of 'off network' scholars to publish as a result of material and cultural resources as well as on translanguaging and social and political issues in language education. Like Lillis, Curry, Li and Canagarajah, Diane Belcher and Zoltan Dornyei are both applied linguists whose work has influenced those working in ERPP. Belcher's work concerns academic writing and learning to write academically. Dornyei's contribution, on the other hand, is his process-oriented model of motivation, whereby people unconsciously monitor their motivation and adjust it based on their goals, together with the importance of group relations and cohesiveness in classroom learning.

Lev Vygotsky is largely cited in ERPP as a result of his theories of social learning and development, which are central to ideas of scaffolding novice writers through various kinds of linguistic and instructional support. Similarly Jane Lave's work (with Etienne Wenger, listed just outside the table) on situated learning and 'legitimate peripheral participation' have been influential in academic writing instruction. These express the view that learning is social and the result of our experience of participating in communities. This is also the position of Albert Bandura, whose work has promoted the importance of agency and self-belief in learning. The idea that learning occurs in a social context with interaction between the person, environment, and behaviour of others corresponds closely with those of Lave, Vygotsky and Bakhtin to support social views of learning in ERPP and the importance of interaction.

These lists of the most highly cited authors in ERPP reveal something of the diverse nature of the field and something of its development. On the list are linguists, educationalists, sociologists and cognitive psychologists, indicating the diverse nature of a field which values theories of learning, of discourse and of social interaction in communication and language learning.

5.3 Most influential publications

We assume here that the most influential publications are those which have received the most citations. Citation, of course, is the standard means by which authors acknowledge the source of their methods, ideas and interpretations, as well as establishing themselves in the valued literature of the community. It is also widely used as a rough measure of a paper's importance (Hyland & Jiang, 2019). Tables 4 to 5 show the top 15 of these results.

Table 4 Most highly cited publications from 1982 to 2007

Publications	cites	normed
Swales, J. (1990). <i>Genre analysis: English in academic and research settings</i> . Cambridge: Cambridge University Press.	52	8.0
Bazerman, C (1988). <i>Shaping written knowledge: The genre and activity of the experimental article in science</i> . Madison, Wisconsin: University of Wisconsin Press.	31	4.8
Berkenkotter, C., & Huckin, T. N. (1995). <i>Genre knowledge in disciplinary communication: Cognition, culture, power</i> . Lawrence Erlbaum.	29	4.4
Hyland, K (2000/2004). <i>Disciplinary discourses: Social interactions in academic writing</i> . Harlow: Longman.	23	3.5
Bhatia, V. K. (1993). <i>Analysing genre: Language use in professional settings</i> . London: Longman.	23	3.5
Hyland, K. (2001). Humble servants of the discipline?: Self-mention in research articles. <i>English for Specific Purposes</i> , 20(3), 207–226.	20	3.1
Halliday, M. A. K. (1994). <i>An introduction to functional grammar</i> . London: Edward Arnold.	20	3.1
Myers, G. (1989). The pragmatics of politeness in scientific articles, <i>Applied Linguistics</i> , 10(1), 1–35.	17	2.6
Hyland, K. (1996). Writing without conviction? Hedging in science research articles. <i>Applied Linguistics</i> , 17(4), 433-454.	16	2.5

Biber, D, S Johansson, G Leech, S Conrad, & E Finegan (1999). <i>Longman grammar of spoken and written English</i> . Harlow: Longman.	16	2.5
Johns, A. M. (1997). <i>Text, role and context: Developing academic literacies</i> . Cambridge: Cambridge University Press.	12	1.8
Hyland, K. (1998). <i>Hedging in Scientific Research Articles</i> . Amsterdam: John Benjamins.	11	1.7
Thompson, G., & Ye, Y. Y. (1991). Evaluation in the reporting verbs used in academic papers. <i>Applied Linguistics</i> , 12(4), 365-382.	11	1.5
Flowerdew, J. (2000). Discourse Community, Legitimate Peripheral Participation, and the Nonnative - English - Speaking Scholar. <i>TESOL Quarterly</i> , 34(1), 127-150.	10	1.5
Thompson, D. K. (1993). Arguing for experimental “facts” in science: A study of research article results sections in biochemistry. <i>Written Communication</i> , 10(1), 106-128.	9	1.4
Bourdieu, P. (1988). <i>Homo academicus</i> . Stanford: Standard University Press.	8	1.2

Table 5 Most highly cited publications from 2008 to 2022

Publications	cites	normed
Swales, J. (1990). <i>Genre analysis: English in academic and research settings</i> . Cambridge: Cambridge University Press.	135	3.6
Swales, J. M. (2004). <i>Research Genres: Explorations and applications</i> . Cambridge: Cambridge University Press.	103	2.8
Lillis, T & MJ Curry (2010). <i>Academic writing in a global context: The politics and practices of publishing in English</i> . London: Routledge.	94	2.5
Vygotsky, L. S., & Cole, M. (1978). <i>Mind in society: Development of higher psychological processes</i> . Harvard: Harvard university press.	85	2.3
Biber, D, S Johansson, G Leech, S Conrad, & E Finegan (1999). <i>Longman grammar of spoken and written English</i> . Harlow: Longman.	68	1.8
Hyland, K (2000/2004). <i>Disciplinary discourses: Social interactions in academic writing</i> . Harlow: Longman.	53	1.4
Lillis, T., & Curry, M. J. (2006). Professional Academic Writing by Multilingual Scholars. <i>Written Communication</i> , 23(1), 3-35.	52	1.4
Hyland, K (2005). <i>Metadiscourse: Exploring interaction in writing</i> . <i>Continuum discourse series</i> . London: Continuum.	43	1.2
Flowerdew, J. (2000). Discourse Community, Legitimate Peripheral Participation, and the Nonnative - English - Speaking Scholar. <i>TESOL Quarterly</i> , 34(1), 127-150.	43	1.2
Hyland, K. (2016). Academic publishing and the myth of linguistic injustice. <i>Journal of Second Language Writing</i> , 31, 58-69.	41	1.1
Cohen, L., Manion, L., & Morrison, K. (2007). <i>Research methods in education (6th ed.)</i> . London: Routledge.	41	1.1
Hyland, K. (2005). Stance and engagement: a model of interaction in academic discourse. <i>Discourse Studies</i> , 7(2), 173-192.	40	1.1

Canagarajah, A. S. (2002). <i>A geopolitics of academic writing</i> . London: University of Pittsburgh Press.	38	1.0
Flowerdew, J., & Li, Y. (2009). English or Chinese? The trade-off between local and international publication among Chinese academics in the humanities and social sciences. <i>Journal of Second Language Writing</i> , 18(1), 1-16.	36	1.0
Canagarajah, A. S. (1996). “Nondiscursive” requirements in academic publishing, material resources of periphery scholars, and the politics of knowledge production. <i>Written Communication</i> , 13(4), 435-472.	32	0.9

Swales, Hyland and Flowerdew, discussed as appearing on the most cited lists in Table 3, are also prominent in both periods for their influential publications. Swales’ (1990) *Genre Analysis*, mentioned earlier, heads both lists and was extremely influential in helping to kick start the interest in researching academic publishing and promoting this form of discourse analysis as a mean to do so. The later list also includes his *Research Genres*, which seeks to explore the various theoretical and methodological issues surrounding genre analysis since the original book and extends the genres to other academic texts.

Hyland has four items in each list with one, *Disciplinary Discourses*, appearing in both. This book sets out a framework for studying writer-reader interactions in published texts and helped the movement using corpora to study disciplinary cultures through their specific linguistic and rhetorical expressions. The earlier period also includes a book and paper on hedging in academic writing and the latter a work on metadiscourse and a paper on stance. All of which were influential in providing models and approaches which promoted the study of published texts. Flowerdew’s case study of a non-native English-speaker seeking to publish in international journals also appears in both lists, drawing on notions of discourse community and peripheral participation to help explain the writer’s experience, and encouraging further work into publishing by second language writers. This is a topic Hyland takes up in his 2016 paper arguing that both native and non-native English speakers struggle with the conventions of writing for publication. Flowerdew’s second paper in the lists, with Yongyan Li, discusses the

dilemma of Chinese writers of where to publish to best further their careers. Biber et al's *Longman Grammar* is also prominent in both periods, providing researchers with a corpus-based description of different registers of English, including academic, as baseline data for their studies.

All the other writers appear only in one list and we can see the major drivers of genre studies in the earlier period. Along with Swales, the important books by Bazerman, Berkenkotter and Huckin, Bhatia, and Johns all provided the foundation for the huge growth of academic genre studies over the next few decades. We also find here Halliday's groundbreaking *An Introduction to Functional Grammar* which sets out the author's systematic description of grammar as a semiotic resource, a model which supports a great deal of ERPP discourse analyses. The papers by Myers, Thompson and Ye and Thompson are good examples of the kinds of rhetorical and linguistic studies which characterise the ERPP genre research, Myers focusing on pragmatic mitigation features, Thompson and Ye on categorising positive and critical citations, and Thompson on identifying six rhetorical moves promoting findings in biochemistry research articles. Bourdieu's well known book offers an original analysis of academic culture in France where power plays a key role making or breaking reputations. The book remains influential in providing researchers with an approach to the study of modern culture and education.

The later period is dominated by works by Swales, Hyland and Flowerdew, who contribute eight of the most cited 15 works, with two contributions each by Lillis and Curry and by Canagarajah. Lillis and Curry's 2010 book and earlier article in *Written Communication* have been extremely influential in promoting the 'New Literacies' ideas of Brian Street (1995) in academic publishing research. This argues that literacy learning is a social practice, foregrounding issues of epistemology and identities, rather than skill or socialization, and so emphasising the importance of critical literacy, power and ideology. Learning is therefore a powerful tool for access, communication and identification within the academic community, and is therefore closely associated with

issues of social justice and equality. Canagarajah's work also offers a critique of current academic publishing, drawing on his experience as a peripheral scholar writing in Sri Lanka. Lillis and Curry and Canagarajah, in different ways, have therefore emphasised the political dimensions of academic publishing and the impacts of social and institutional inequalities experienced by non-native English speakers.

Of the remaining two works in the more recent list, Vygotsky's *Mind in Society* has been extremely influential with those working in Higher Education as his theories of social learning and development are central to notions of scaffolding students through various kinds of linguistic and instructional support. Cohen, Manion and Morrison's book, on the other hand, is the standard text for research methods in education. Now in its 8th edition, it covers the whole range of methods used in educational research with clear discussions of design, data collection, analysis and reporting.

Interestingly, despite the move away from books, over half of the 30 most cited items are books, with 8 on the earlier list and 9 on the later, while the remaining 13 are journal articles. In recent years, institutional research assessors have sought to promote journal articles as the principal venue for research outputs, regarding them as the most direct route to visibility and government funding. This short-term advantage, however, does not seem to translate into long-term citations, as it seems that the most influential and enduring work in ERPP is found in monographs. Only the most significant work in journals has the longevity of a published book. A scan of Google Scholar confirms that the citations of almost any well-published author will find books clustering at the top of the list.

5.4 Most productive countries/regions

Western countries, particularly the United States, have traditionally dominated academic publishing as a result of financial investments in R&D, the possession of an established research infrastructure, high salaries, and environments conducive to scholarly networking and publishing. In recent times, however, globalisation, abetted by the emergence of the internet, has enabled previously underperforming countries to

participate more fully in academic research and publishing. Many countries around the world have sought to raise the status of their universities through investment and improved conditions, to gain prestige, attract prolific academics, and appeal to fee-paying international students. This has led them into the global knowledge marketplace and into metrics-driven competition to publish, with greater pressure put on academics to see their work in prestigious English language journals.

The affiliations of authors in our data illustrate this expansion, and the emerging participation of Asian countries. Table 6 shows, in rank order, the 15 most productive countries and regions in research over the two periods using the institutional affiliation of every author in the corpus.

Table 6 Most productive countries/regions across the 40 years (by author affiliation)

1982-2007			2008-2022		
Country	No.	%	Country	No.	%
USA	324	49.7	USA	1114	30.1
England	91	14.0	England	481	13.0
Canada	37	5.7	Australia	360	9.7
Australia	36	5.5	Mainland, China	326	8.8
Hong Kong, China	29	4.4	Spain	317	8.6
Spain	20	3.1	Canada	190	5.1
Scotland	15	2.3	Turkey	144	3.9
South Africa	11	1.7	Germany	143	3.9
Germany	9	1.4	Hong Kong, China	98	2.6
New Zealand	9	1.4	Sweden	85	2.3
Israel	8	1.2	Netherlands	80	2.2
Finland	7	1.1	New Zealand	79	2.1
Japan	7	1.1	Taiwan, China	78	2.1
Netherlands	7	1.1	Brazil	65	1.8
France	6	0.9	South Africa	63	1.7

The results show that many of the leading contributing countries publishing in ERPP in the earlier period continue into the later one. The USA and England remain unchanged at the most productive countries, although both have seen their percentage share of the

total fall, the US substantially. Other established countries, Australia, Spain, Germany and the Netherlands, have climbed the list, both in terms of position and their contribution to the total number of published papers on academic publishing. Canada, New Zealand, South Africa and Hong Kong have slipped down it while five have dropped out of the table altogether, including some established publishing countries such as Japan and France. They have been replaced by one European and four Asian countries. Sweden, Turkey, Taiwan and Brazil have all invested heavily in their universities in recent years and all four are in the top 25 of publications in 2022 for journals classified by Elsevier's abstract and citation database, Scopus, which covers over 36,00 titles³.

The outstanding country on the list, of course, is China. Authors affiliated with Chinese institutions are now the most prolific producers of articles worldwide, showing the strongest growth rate between 2018 and 2020 (SMT, 2021). Over the last 15 years, China moved from 14th to 1st position in world output, overtaking the US in 2020 and now producing almost a fifth of all peer-reviewed papers in Science Citation Index (SCI) journals, with the U.S. in second place at 18.3% (Koshikawa, 2020). One key reason for this is the massive increase in funding and support for research by the government in recent years (e.g. Hyland, 2023). Articles in SCI journals written by authors from Chinese institutions has increased from 120,000 a year in 2009 to 450,000 in 2019 (Mallapaty, 2020). Some estimates even suggest that Chinese authors, from anywhere in the world, were listed on 34.5% of all papers published in 2016 – a 22% increase since 2000 (Xie & Freeman, 2019). This increase in publishing has been matched by an increase in articles discussing ERPP.

5.5 Journals publishing ERPP papers

The last step in our analysis involved determining which journals had published the 4,354 papers returned by our search criteria. Table 7 shows the most popular publishing

³ <https://www.scimagojr.com/countryrank.php?order=itp&ord=desc&year=2022>

venues for authors working in the field of academic publishing in English, with the number of papers published and the proportion of the total in each journal. One striking feature is the concentration of articles in a relatively few journals in the first period with 37% of all our papers appearing in the top 15. This concentration is more relaxed in the later period as more journals began to appear and more venues started receiving ERPP research, as the top 15 accounted for under 29% of the total.

Table 7 Journals publishing most ERPP papers (1982-2007)

Journals 1982-2007	No	% of all	Journals 2008-2022	No	% of all
English for Specific Purposes	115	17.6	Teaching and Teacher Education	118	3.2
Teaching and Teacher Education	25	3.8	J of English for Academic Purposes	109	2.9
Teaching of Psychology	18	2.8	BMC Medical Education	103	2.8
Health Education Research	17	2.6	English for Specific Purposes	91	2.5
Higher Education	15	2.3	Journal of Pragmatics	83	2.2
Int J of Educational Development	15	2.3	Computers in Education	79	2.1
Journal of Social Work Education	14	2.1	System	66	1.8
Int Journal of Science Education	13	2.0	Revista De Psicodidactica	65	1.8
Journal of Pragmatics	11	1.7	Journal of Second Language Writing	62	1.7
Research in Higher Education	11	1.7	Studies in Higher Education	53	1.4
Journal of Second Language Writing	11	1.7	Higher Education	52	1.4
Educational Research	10	1.5	Higher Ed Research Development	52	1.4
Applied Linguistics	9	1.4	Iberica	41	1.1
Journal of School Health	9	1.4	Linguistics and Education	41	1.1
British Journal of Sociology of Education	8	1.2	Applied Linguistics	39	1.1

As can be seen, *English for Specific Purposes* contained nearly a fifth of all ERPP papers published before 2008, testifying to its huge significance and influence on academic English research. It remained a key source in the second period, but there has been an explosion of research and journals publishing it so that the proportion of papers in the top journals has fallen and become more widespread. Six journals appear in both lists, with *Teaching and Teacher Education* rising to the top after 2008, with 3.2% of articles. *English for Specific Purposes*, *Journal of Pragmatics*, *Journal of Second Language Writing*, *Higher Education* and *Applied Linguistics* all remain prominent in both periods.

Interestingly, the earlier period is dominated by education journals in various fields – psychology, health, social work, science, educational development, sociology and so on. Only *Teaching and Teacher Education* and *Higher Education* survive into the later period, although the former has risen to the first place and both have increased the number of papers they publish on the topic. There are 8 education journals in the second list, many concerned, unsurprisingly, with higher education with *Studies in Higher Education*, *Higher Education* and *Higher Ed Research Development* all in the top 15. The importance of publishing to medical researchers is underlined by over 100 papers in the journal *BMC Medical Education*. The last 20 years, however, have seen ERPP largely flourish as an applied linguistics field, with writing theorists, researchers working in pragmatics, practitioners and specific language professionals all adding their voices to the field.

6. Discussion

In this bibliometric analysis we see a significant maturation of ERPP research over recent years, marked by a shift from predominantly pedagogical concerns to encompass broader methodological and professional themes. The changes reflect the massive growth of academic publishing created by Open Access, technological change and an exponential increase in the number of researchers, driven by the importance of

publishing and citation metrics to their careers. Such a shift has provided the stimulus for several of the changes noted here.

One major shift has been the growing research interest in academic publishing and the need for more comprehensive research methodologies to capture the contexts, experiences and outputs of actors. By incorporating more diverse methodological approaches, including mixed methods, meta-analyses and case studies, ERPP research is seeking to provide deeper insights into global research patterns and how these are influencing the publishing success of non-native English speakers. Another significant change has been the flourishing of practitioner development within ERPP, reflecting the burgeoning ‘writing for publication’ courses, workshops and textbooks that have emerged in the last 20 years. This also points forward to the need for further studies focused on how such current training programmes might be enhanced and evaluated. Such research would help both develop and determine the effectiveness of these programmes and could lead to more tailored educational interventions for writers in different contexts and cultures. This is particularly important as researchers seek to address a challenging publishing landscape which places greater career pressures on researchers, encourages international collaborations, and witnesses the industrial scale emergence of predatory publishers.

From a practical standpoint, the rise of open access and digital technologies in academic publishing demands innovative responses to how ERPP is taught and how academics participate in the publishing world. Clearly, online submission platforms and the internet make research and submissions less cumbersome. However, using digital tools for collaborative research and writing, selecting an appropriate reputable journal and successfully navigating the review and revision process are often unfamiliar to junior scholars and daunting for most academics. Implementing training modules that emphasize these aspects can enhance the chances of a successful publication and improve the writing abilities of researchers, particularly those from English-speaking

backgrounds. The themes identified in this paper may help inform the areas which trainers might attend to in their courses.

The urgency of this endeavour is underpinned by the growing contribution of countries previously on the periphery of global publishing that we have identified in this paper such as China, Taiwan and Brazil. This development encourages trainers to plan their courses to consider the varied academic and cultural contexts which influence research and publication practices. Future ERPP initiatives might therefore better accommodate these potential differences by including modules on cross-cultural competence and intercultural pragmatics. By doing so, ERPP can play a pivotal role in shaping a more equitable and accessible academic publishing environment to facilitate more inclusive scholarly dialogues.

7. Conclusions

In this bibliometric study we have sought to trace the development of English for Research and Publication Purposes through its formative years to the significant field it has become today. With a growing number of research papers on the topic, more journals publishing in the area, and indeed, with a dedicated journal to the topic, ERPP has truly arrived and started to make an influential contribution to applied linguistics and language education.

Our study shows that publishing on ERPP really took off after about 2008 with a surge in both publications and in journals containing this work. While perennial themes in this literature concern corpora, discourse and genre, we also note a shift away from a focus on pedagogical issues and classroom practices towards emerging academic publishing contexts such as *open access*, *knowledge production* and *collaborative learning*. This maturation of the field is also revealed in the growing concern with diverse research methods, with practitioner development, and with issues in higher education which may encourage or hinder research and publication in English.

We have also identified the field's most influential scholars and publications. Swales, Hyland, Halliday, Flowerdew and Biber are prominent in both author lists and their work figures noticeably in the publication lists. We see a greater number of specialists in academic writing in the later period and work consolidating earlier publications on genre and interaction. Critical views and academic literacy work are more influential from 2008 and together these authors and publications underline the diverse nature of a field which values theories of learning, of discourse and of understanding L2 writers and social interaction in writing. The affiliations of these authors show a widening researcher base and the growing importance of Asian countries, particularly the rise of China as a leading source of research in the field. Finally, we can see a growing number of journals involved in publishing this research and the growing participation of those in applied linguistics.

We should point out that the texts, authors and journals we have identified here are only the tip of a very large iceberg. Beneath the surface are, of course, many thousands more articles in unindexed journals and authors who are less cited. Our paper privileges the pinnacle of the field, the nearly 4,500 articles available on the Web of Science (WoS) and we are unable to find space for the many regional and local journals, unpublished research papers and less cited authors, countries and journals. Such work is a fruitful area for further study, but we would argue that the most accessible and celebrated works set the tone for the field as a whole; they influence, and perhaps lead, the themes that are researched and the methods used to do so. Together this work is self-referencing and self-reinforcing, contributing to a way of thinking and body of knowledge which helps define the field. It also helps define the rapidly expanding field of research and practice which is ERPP.

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