Dissertation: "Writing for publication in four disciplines: Insights into text and context"

Lisa McGrath, Stockholm University

1 Introduction

Scholars are under increasing pressure to publish in high-impact, international, and often, English-language journals. This trend calls for an account of the evolving genres, discourses and practices of disciplinary communities, in part to inform English for Academic Purposes (EAP) courses designed to support scholars writing for international publication.

EAP scholarship addresses four key areas: the development of theory, analytical models and methods to research academic genres (e. g. Swales 1990); genre descriptions (e. g. Kuteeva/ McGrath 2015); pedagogy (e. g. Hyland 2007); and critical research into the possible repercussions of English hegemony for non-native English speakers and the status of local languages (e. g. Ferguson 2007). My thesis touches on all four areas. In the four studies that comprise the thesis, I investigate connections between discipline, and the genres, discourse, publication outlets and languages used by anthropologists, historians, linguists and pure mathematicians: The studies are:

1) Kuteeva, Maria/McGrath, Lisa (2015): "The theoretical research article as a reflection of disciplinary practices: The case of pure mathematics." *Applied Linguistics* 36: 215–235.
2) McGrath, Lisa (2014): "Parallel language use in academic and outreach publication: A case study of policy and practice." *Journal of English for Academic Purposes* 13: 5–16.
3) McGrath, Lisa (under review): "Open access writing: An investigation into the online drafting of and revision of a research article in pure mathematics."
4) McGrath, Lisa (under review): "Self-mentions in anthropology and history research articles: Variation between and within disciplines."

2 Theoretical framework

In the dissertation reported here, writing for publication is understood as a situated social practice (e. g. Flowerdew 2013) carried out by individuals operating within academic networks, which are associated with disciplines. As a starting point, I view disciplines as tangible organizations (e. g. Bondi 2006), with varying characteristics in terms of epistemology and social practices (Becher 1989). Members of a particular discipline share "a body of accumulated knowledge" (Krishnan 2009: 9), a common set of interests, research methodologies, concepts and theories. Furthermore, disciplines are generative (Becher 1989) in that they influence surrounding practices. For example, connections can be drawn between discipline and facets of the research and dissemination process, such as whether new knowledge is produced by collaborative groups or by individuals, and whether monographs or RAs are the more prestigious genre (Becher 1989).

Disciplinary communities communicate via genres, and therefore function as "discourse communities" (Swales 1990: 26), a group with "a broadly agreed set of common goals, mechanisms of communication among its members [and] mechanisms to provide information and

feedback". Genres themselves are "staged, structured, communicative events, motivated by various communicative purposes, and performed by members of specific discourse communities" (Flowerdew 2011: 140). Texts "perform" genres (Shaw 2015), meaning that some texts align closely with prototypical generic textual and rhetorical patterns, while others do not.

While many genres are common to many disciplines (both anthropologists and mathematicians write RAs), disciplinary differences are discernible on the macro and micro levels of text or discourse. For a definition of academic discourse, I adopt Hyland's (2011: 171) "ways of thinking and using language that exist in the academy". Discourse is shaped by and shapes the practices, beliefs and purposes of disciplinary groupings (e.g. Hyland 2011). Therefore, a reference to the disciplinary discourse of mathematics refers to "the language used by mathematicians, and the relationships and social practices that are constructed through discourse and that are manifest in the texts produced by the community" (McGrath 2015: 24).

3 The Studies

3.1 Study I

The aim of Study I was to describe and motivate the structure of pure mathematics RAs. A corpus of 22 published RAs written by five authors was collated. Sections and section headings (Yang/Allison 2003) were mapped, followed by a move analysis (Swales 1990) conducted in collaboration with a disciplinary expert. The textual analysis was supplemented by interviews with the authors of the RAs in order to establish a rationale for the emergent structure.

Results revealed that pure mathematics RAs do not adopt an Introduction-Methods-Research-Discussion structure. Instead, a dual argument structure was found. This comprised the mathematical argument which lays out the stages of the proof, and the meta-mathematical argument which contextualizes the result(s). While a prototypical rhetorical 'shape' could be established (cf. Kuteeva/McGrath 2015: 14), variation in terms of section headings and arrangement of content was observed.

Interview data provided a rationale for the findings of the textual analysis. The dual argument structure reflects the research process in the discipline, while flexibility in terms of headings and organization allows the author to arrange the text in a way that is best suited to guiding the reader through the results.

The study contributes to EAP genre research in that it is the first to map the structure of pure mathematics RAs. The findings provide insight into research and writing practices in pure mathematics, and how these practices shape the disciplinary discourse, and therefore inform EAP practitioners with mathematicians in their writing classes.

3.2 Study II

Study II employed case-study methodology to explore multilingual scholars' publication practices. The genres and languages used for outreach and academic publication by 15 informants across three departments at a Swedish University were investigated. The aim was to explore to what extent parallel language policy meets practice. Data were drawn from a questionnaire, interviews with the informants, a data-base trawl and a reading of policy documents.

The results revealed disciplinary differences in scholars' opportunities to publish in the local language and English. The use of language was largely determined by target audience and

object of study: scholars working in disciplines with a coherent local-language or practitioner audience, or who were writing about a locally-relevant topic, were able to publish in Swedish. Publications targeting an international audience were written in English. Informants reported a lack of agency in terms of language choice, and the increased emphasis on publication as a performance criterion as a reason for prioritising RAs written in English over, for example, outreach genres. Despite this emphasis, evidence of publication in Swedish and other languages was found.

Based on the results, I recommend that disciplinary differences should be taken into account in language policy. Furthermore, if one of the aims of parallel-language policy is to ensure publication in the local-language, local reward systems should give greater recognition to outreach and practitioner-oriented publication.

3.3 Study III

Study III also employed case study methodology, this time to investigate collaborative writing for publication in pure mathematics via a blog. The *Polymath* blog unites professional mathematicians (and, unusually, non-professional mathematicians) in solving open problems and reporting results through a collaboratively written RA. My aim was to gain 'behind-the-scenes' access to the process of article construction through an analysis of the blog posts.

The results of a descriptive coding process provided support for previous findings from genre analyses of RAs in mathematics using different methods, such as the arrangement of the argument structure. The writing process was shown to be non-linear, as participants gave attention to the mathematical argument, meta-mathematical argument, new knowledge construction and proof-reading concurrently. The analysis gave insight into how decisions pertaining to genre and dissemination outlets were made, and how the RA was constructed to cater for the needs and interests of a community of readers and writers outside of a prototypical disciplinary discourse community.

The significance of the study lies mainly in the method in that a new data source for research into the RA genre is proposed. The approach constitutes a type of virtual non-participant observational method, as the researcher is able to observe discussions pertaining to writing for publication that would usually take place in privacy. The study also has pedagogical applications: advanced students learning to write RAs could follow the blog to gain insight into the practices of the discourse communities they are seeking to join.

3.4 Study IV

Study IV investigated first person pronoun usage in history and anthropology RAs. A corpus of 36 RAs was compiled (18 per discipline) from informant-nominated academic journals. Starfield and Ravelli's (2006) typology of author roles was used to code all instances of author referential "I" in the data.

The results revealed that all the author roles identified by Starfield and Ravelli were present in the corpus. In addition, a new category was established to account for instances of "I" in the anthropology RAs that were biographical, but did not incorporate explicit reflexivity, which I termed "narrative I". This role was linked to epistemology, as it results from the ethnographic methods used in anthropology, which involve the researcher's own lived experience in the field. However, while some disciplinary patterns were discernible in the data (for example,

the first person pronoun was used more frequently in anthropology than in history), considerable intra-disciplinary variation was also apparent.

The article contributes to EAP research by giving support to the argument that even closely related disciplines employ rhetorical resources differently. However, given the intra-disciplinary variation observed in the data, I also discuss the problem of investigations that prioritise highlighting discoursal conventions in disciplines such as anthropology, which are not subject to the levels of "discoursal rigidity" (Gnutzmann/Rabe 2014: 24) seen in other disciplines. Instead, I argue for more focus on variation in EAP genre investigations.

4 Conclusion

The findings across the four studies support the view that writing for publication is influenced by discipline. Connections were found between epistemological characteristics of disciplines, and the rhetorical choices scholars make. For example, the structure of RAs in mathematics reflected to a certain extent knowledge construction in the discipline, and the use of first person pronouns in history and anthropology articles could be traced to disciplinary methodology. The results also pointed to differences in terms of language of publication and outlet.

Nonetheless, scholars' practices were also shown to be impacted by local, international and digital developments, and the data was characterised by a degree of intra-disciplinary variation. Trowler (2014) argues that the role of disciplines needs to be revisited, as previous descriptions are too rigid when applied to the real world, where categories, boundaries and practices are neither static, nor clear-cut. I conclude that this, coupled with the increasing emphasis on interdisciplinary research, has repercussions for EAP research and teaching, given the prominence of discipline in the theoretical frameworks that guide investigations.

References

Becher, Tony (1989): *Academic tribes and territories: Intellectual enquiry and the cultures of discipline.* Milton Keynes: SRHE, Open University Press.

Bondi, Marina (2006): "'A case in point': Signals of narrative development in business and economics." *Academic discourse across disciplines.* Eds. Ken Hyland/Marina Bondi. Bern: Lang. 49–74.

Ferguson, Gibson (2007): "The global spread of English, scientific communication and ESP: Questions of equity, access and domain loss." *Ibérica* 13: 7–38.

Flowerdew, John (2013): "English for Research Publication Purposes". *The Handbook of English for Specific Purposes.* Eds. Brian Paltridge/Sue Starfield. Oxford: Whiley and Sons. 137–152.

Flowerdew, John (2011): "Some dichotomies in genre analysis for Languages for Specific Purposes." *Researching Specialized Languages.* (Studies in Corpus Linguistics 47). Eds. Vijay Bhatia/Purificacion Sanchez Hernández/Pascual Perez-Paredes. Amsterdam/Philadelphia: Benjamins.

Gnutzmann, Claus/Rabe, Frank (2014): "'Theoretical subtleties' or 'text modules'? German researchers' language demands and attitudes across disciplinary cultures." *Journal of English for Academic Purposes* 13: 31–40.

Hyland, Ken (2007): "Genre pedagogy: Language, literacy and L2 writing instruction." *Journal of Second Language Writing* 16: 148–164.

Hyland, Ken (2011): "Academic discourse." *The Continuum Companion to Discourse Aanalysis.* Eds. Ken Hyland/ Brian Paltridge. London: Continuum. 171–184.

Kuteeva, Maria/McGrath, Lisa (2015): "The theoretical research article as a reflection of disciplinary practices: The case of pure mathematics." *Applied Linguistics* 36: 215–235.

Krishnan, Armin (2009): "What are academic disciplines? Some observations on the disciplinary vs. interdisciplinary debate." *ESRC National Centre for Research Methods Working Paper 03/09.* <http://eprints.ncrm. ac.uk/783/>.

McGrath, Lisa (2015): *Writing for publication in four disciplines: Insights into text and context.* (Doctoral dissertation). Department of English, Stockholm University. <https://www.diva-portal.org/smash/get/ diva2:807174/FULLTEXT01.pdf>.

Shaw, Philip (2015): "Genre analysis." *The Routledge Handbook of English for Academic Purposes.* Eds. Ken Hyland/Philip Shaw. London: Routledge.

Starfield, Sue/Ravelli, Louise (2006): "'The writing of this thesis was a process that I could not explore with the positivistic detachment of the classic sociologist': Self and structure in New Humanities research theses." *Journal of English for Academic Purposes* 5: 222–243.

Swales, John (1990): *Genre analysis: English in academic and research settings.* Cambridge University Press.

Trowler, Paul (2014): "Depicting and researching disciplines: strong and moderate essentialist approaches." *Studies in Higher Education 39.10.* doi: 10.1080/03075079.2013.801431.

Yang, Ruiying/Allison, Desmond (2004): "Research articles in applied linguistics: structures from a functional perspective." *English for Specific Purposes* 23: 264–279.