Reader-Friendliness and Feedback: German-L1 Scholars' Perceptions of Writing for Publication in English

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Abstract

Failure to publish articles in the dominant Anglophone scientific journals has implications for multilingual scholars' future careers and for the global dissemination of scientific knowledge. Despite the importance of this topic, there have been few studies of the perceptions of multilingual scholars engaged in this process. In an effort to close this gap, an online questionnaire was emailed to 153 German-L1 scholars at the ETH Zurich, Switzerland. The 46 respondents ranked 'writing reader-friendly texts' as their number one problem in writing scientific publications in English, followed by 'using correct grammar'. Reader-friendliness was defined by the majority of the respondents as 'writing in a clear and simple style'. The questionnaire also revealed some interesting differences between the views of novice and more experienced scholars regarding the role of different sources of feedback in helping them overcome these problems. The results from the questionnaire will be explored in more detail in follow-up interviews.

Introduction

In the last 30 years international scientific publication has become increasingly dominated by the English language. As long ago as 1986, Eugene Garfield calculated that 90% of the world's scientific citations are for articles published in Anglophone science journals (Garfield 1986), and by 2008 the Institute of Scientific Information listed 95% of indexed natural science journals as using all or some form of English (Thomson Reuters 2008). In a range of publications, John Swales has referred to the increasing 'Englishization' of scientific publishing and the domination of research published by scientists from Anglophone-centre countries such as the USA and Britain (Swales 1987, 1990, 1996, 1997, 2000 and 2004). Although the number of papers published by scientific researchers from China is growing fast, the United States remains the dominant force in global scientific publishing, with articles written by scientists from US institutions accounting for 20% of the world's scientific papers and 30% of the most frequently cited articles (Royal Society 2011).

Because of the dominance and status of the English language in scientific publication, there is increasing pressure on multilingual scholars to publish in English (Canagarajah 1996, 2002; Flowerdew 1999, 1999b; Tardy 2004; and Lillis and Curry 2006, 2010). Statistically, multilingual scholars are said to have greater problems publishing in the mainstream English language journals than their Native English Speaking (NES) counterparts (Marusic and Marusic 2001), and many multilingual scholars certainly feel that weaknesses in their English writing skills put them at a disadvantage (Marusic *et al.* 2002). Several previous studies of the German-L1 academic writing scene have noted that German-L1 scholars feel pressure to publish in English but often feel disadvantaged by their English language competence (Ehlich 2004, 2005 and 2006, and Ammon 2001, 2003 and 2004).

In Switzerland, a small nation with a multilingual population, the role of English has become increasingly important in educational settings. Switzerland can be said to belong to the 'Expanding Circle' of English language use in that English is a foreign language but an increasingly instrumental

one in education and business (Kachru 2001). As in other 'Expanding Circle' nations in Northern Europe (for example Holland, Belgium and the Scandinavian countries), higher education in Switzerland has seen the English language increasingly functioning as an academic *lingua franca* (Murray and Dingwell 2001). Universities across Switzerland now offer master's courses for natural sciences and engineering in English, and at doctoral level more and more PhD students have to publish articles in English as a requirement of doctoral graduation. In the German-speaking part of Switzerland, an increasing number of university departments are adopting a US-style doctoral thesis consisting of a compilation of three or four published research articles (Dong 1998). With the increasingly international and 'Bologna-ized' nature of Higher Education in Switzerland, this group of novice scholars has to 'publish or perish'. However, the German-L1 scholars' articles are sometimes rejected because of weaknesses in their writing skills in English. Typical comments from reviewers are that the writers should 'write in a more concise or reader-friendly way' or 'make arguments clearer for the reader'.

Reader-friendliness is a difficult concept to define exactly. At its most basic level it can be defined as how easy a text is to comprehend based on the style of writing. Formulas to measure reading ease first began in the 1920s and readability formulas are still applied to newspapers, magazines, textbooks, grant applications and other printed media (Severin and Tankard 1992). For many discourse analysts, however, reader-friendliness is achieved by 'writers writing on the premises of the reader' or gearing their texts towards the readers' expectations (Nystrand 1986: 46). For Reid, reading and writing are 'integrally connected' (Reid 1993: 64). Huckin and Olsen in *Technical Writing and Professional Communication,* argue that 'readability is largely determined by how closely the text fulfils the reader's expectations' and 'matches with the conventional textual pattern of development' and the 'expectations of the culture in which the writer is operating' (Huckin and Olsen 1991: 406).

In a series of studies on the differences between English and German academic prose, Michael Clyne (1982, 1983, 1985, 1987 and 1991) has argued that 'digressions from a linear structure are tolerated much more in German-language countries, as are repetitions' (Clyne 1985: 116). Clyne further argues that German-L1 academic writers demonstrate a lack of 'reader-friendliness' differing from NES academic writers in terms of linearity, discontinuity, integration of data and textual organisation markers (Clyne 1987). Hinds, too, considers German as a 'reader-responsible language' compared to English, which is a 'writer-responsible language' (Hinds 1987). According to Weigle, readers from writer-responsible cultures, (which would presumably include most editors of high-impact science journals published in English) are likely to find the writing of those from a reader-responsible cultures 'difficult to read, poorly organised or excessively vague' (Weigle 2002: 22).

In recent years, many of the claims made by these Contrastive Rhetoric (CR) studies of German and English have been undermined by changing definitions of culture (Connor 2004). CR has been criticised for tending to see culture as something static, rather than dynamic and susceptible to global influences (Atkinson 2004). Additionally, it should not be forgotten that scientific research is based on a stock of shared knowledge that transcends national boundaries. Science, as Mauranen has pointed out, is essentially cross-cultural and 'the genres of scientific discourse are international' (Mauranen 1993 39). Indeed, Fandrych and Graefen (2002) argue that the ways of writing and constructing texts in the natural sciences have become increasingly similar between German and English.

In previous studies of L2 scientific writers learning to write for publication in English (Blakeslee 1997, Dong 1996, Flowerdew 2000, Gosden 1996, Li 2006, and Li and Flowerdew 2007) an apprenticeship metaphor has often been used to describe the way in which less experienced L2 writers work together with a more experienced member of the discourse community in order to learn the special 'ways of meaning' associated with a particular discipline. It is claimed that the end result of such an apprenticeship process is that novices are able to shift from peripheral participation to become fully-fledged members of the discourse community. This process is usually interpreted as being similar to the one Lave and Wenger (1991) refer to as 'legitimate peripheral participation' in a 'community of practice'. Recently, L2 writing researchers have been increasingly interested in the role of different forms of feedback as one way to encourage and consolidate this process (Hyland and Hyland 2006).

Despite some evidence from previous research about the problems of German-L1 academic writers writing in English already mentioned above, there have been few 'bottom-up' studies investigating what this group of writers perceive their linguistic problems to be, and how they rate the usefulness of

various forms of feedback or support in learning to become more successful scientific writers in English. In order to see how German-L1 researchers working at ETH Zurich, Switzerland, perceived their difficulties and what they felt about the role of different sources of feedback on their writing I composed an online questionnaire in order to explore the following research questions:

- Which language areas does this group of German-L1 scholars identify as being the most difficult for them in learning to write texts suitable for scientific publication in English?

- What sources of feedback does this group of German-L1 scholars perceive as being most useful in learning to write texts suitable for scientific publication?

- Do more experienced scholars have different preferences than novice scholars for certain types or sources of feedback?

- How do the German-L1 scholars perceive the issue of reader-friendliness?

Method

In order to explore these questions I decided to undertake a two-part survey, comprising an online questionnaire and follow-up interviews following Creswell's (2002) conception of a mixed-methods design in which quantitative survey data are first collected and then explained in later qualitative interviews.

Following a piloting phase, the following lists of questions were compiled in an online questionnaire using SphinxSurvey Software:

1. Which language areas do you find most difficult when writing a scientific article in English?

2. With which aspect of writing in English do you feel you still require more language support?

3. Which sources of feedback or support have been most useful to you in learning to write a scientific article?

4. How important to you are the following aspects in making your writing more 'reader-friendly'?

5. How many articles have you published in English?

Depending on the question, respondents were able to rank answers from a pull-down menu of options or indicate preferences using a 5-point Likert scale. In addition to these main questions, the respondents were requested to provide further details about their first language and amount of experience writing in English. At the end of the questionnaire they were asked if they would like to take part in a follow-up interview and, if so, they were asked to provide contact details.

An email containing the link to the questionnaire was sent out to 153 German-L1 researchers working within various departments of the ETH Zurich, in natural science and engineering fields. The email explained the purposes of the research and assured the participants of confidentiality and anonymity.

The questionnaire was completed by 46 of the 153 respondents it was emailed to, a response rate of around 33%, in line with what is typical for an Internet-based survey (Reips, 2002 and Solomon 2001). The responses were automatically collated online using the SphinxSurvey programme. The data was downloaded from the SphinxSurvey website and transferred to SPSS for more detailed analysis.

Findings

The findings from the questionnaire are presented below, based on the responses to each of the questions. Questions 1 and 2 produced very similar responses and are combined below.

Most difficult language area and area requiring support
Table 1 shows the language areas cited by the respondents as being most difficult when writing a scientific article in answer to question one of the questionnaire: 'Which language areas do you find most difficult when writing a scientific article in English?' Writing reader-friendly text was placed in first place by 14 of the 46 respondents (30.4%), closely followed by using correct grammar, which was seen as being the most difficult aspect of writing by 13 of the respondents (28.3%). Maintaining logical flow of ideas and achieving paragraph unity were placed in third and fourth place respectively. This ranking of elements was exactly the same for the second question of the survey: 'With which aspect of writing do you feel you still require more language support?' (Table 2 below) reinforcing the impression that the majority of this group of German-L1 scholars saw reader-friendliness and grammar as the two most important and most difficult aspects of writing a scientific text in English.

Table 1: Which language areas do you find most difficult when writing a scientific article in English?

Language area	Frequency	Per cent
Writing reader-friendly texts	14	30.4
Using correct grammar	13	28.3
Maintaining logical flow of ideas	8	17.4
Achieving paragraph unity	3	6.5
Achieving overall text unity	2	4.3
Managaging visual data	2	4.3
Using appropriate academic style	2	4.3
Meeting publishing conventions	1	2.2
Using field vocabulary	1	2.2
Total	**46**	**100.0**

These findings, though limited by the scale of the study, suggest that there is a high awareness among this group of German-L1 scientific researchers of the problem of writing reader-friendly text in English, and a corresponding need to offer language support or training in these areas.

Table 2: With which aspect of writing in English do you feel you still require more language support?

Language area	Frequency	Per cent
Writing reader-friendly texts	**15**	**32.6**
Using correct grammar	**13**	**28.3**
Maintaining logical flow	**7**	**15.2**
Achieving paragraph unity	**4**	**8.7**
Achieving overall text unity	**4**	**8.7**
Using field vocabulary	**2**	**4.3**
Using appropriate academic style	**1**	**2.2**
Total	**46**	**100.0**

When the findings were broken down further and the number of publications of each respondent compared, it was found that those scientific researchers with more publications tended to place the reader-friendly problem in first position, whereas the novice scholars, who had not yet published an article, tended to place grammar in the first position.

Most important types of feedback

Table 3 shows the number of participants ranking different sources of feedback as most important to them in learning how to write a scientific text in English. From the 46 respondents who answered this question, 21 (45.7%) chose 'feedback from the professor or supervisor' as the most important source of feedback. In second place, cited by ten respondents (21.7%), was 'feedback from peers.' 'Feedback from language teachers' was in third place, cited as most important by eight respondents.

These findings seem to fit with the pattern found in numerous studies of L2 writing instruction that, despite persuasive pedagogical arguments for peer feedback, novice academic writing students tend to prefer feedback from teachers or supervisors, who they perceive as having more expert knowledge than their peers (Leki 1991, Saito 1994 and Zhang 1995).

Table 3: Which sources of feedback have been most useful to you in learning to write a scientific article?

Source of feedback or support	Frequency	Per cent
Feedback or support from professor or supervisor	21	45.7
Feedback or support from peers	10	21.7
Feedback or support from language teachers	8	17.4
Feedback or support from other native speakers	4	8.7
Feedback or support from reference books	1	2.2
Other source of feedback	1	2.2
Total	**46**	**100.0**

Defining reader-friendliness

Regarding the issue of reader-friendliness, Table 4 shows that 19 of the 46 respondents (41.3%) rated clear and simple style as the most important factor in achieving a reader-friendly text. In second place was overall text unity, cited by 13 of the respondents (37%). Paragraph unity, which was cited as the most important feature of reader-friendliness by 10% of the respondents, was in third place. Ordering of information and use of short sentences were considered of greatest importance by less than 5% of respondents. Sophisticated style was not chosen by any respondent as an important factor in writing a reader-friendly text.

Table 4: How important to you are the following aspects in making your writing more 'reader friendly'?

Language Aspects	Frequency	Per cent
Clear and simple style	19	41.3
Text's overall unity	17	37.0
Paragraph unity	5	10.9
Ordering of information	2	4.3
Short sentences	2	4.3
Use of linking words	1	2.2
Total	**46**	**100.0**

These findings suggest the respondents had a broadly similar conception of reader-friendliness, sharing a common awareness that simplicity, clarity and overall unity of the text are important factors in successful scientific writing. The claim that a scientific writer should aim to inform not to impress (Matthews and Matthews 2009) seemed to be uppermost in the minds of this group of German-L1 scientific writers.

Differences between novice and more experienced writers

In order to ascertain if the novice scholars (defined as those who had not yet published an article) and the more experienced scholars (defined as those who had already published more than one article) showed distinct preferences for types of feedback, a cross tabulation was run in SPSS. The findings suggest that the two groups were different in their feedback preferences as well as in the way in which they ranked problems, already mentioned above.

Table 5, below, shows that those scholars who had not yet published a first article were most likely to cite their professor or supervisor as being the most important source of feedback. Twelve out of fourteen of these novice scholars cited their professor or supervisor as being the most important source of feedback, clearly indicating the strong dependence of this group of researchers on expert feedback. Interestingly, none of this group cited peer feedback as being an important source of feedback.

For those more experienced scholars who had already published one article, the role of expert feedback was still the most important factor. Five out of eight of these respondents rated their professor or supervisor as the most important source of feedback. However, for those respondents who had already published two articles, the role of the supervisor seemed to become less important and the role of peer feedback seemed to increase. In this group only four respondents cited their professor as being the most important source of feedback, but seven respondents cited peer feedback as being the most important form of feedback.

Table 5. Cross-tabulation: Number of Articles Published Vs Usefulness of Feedback

Number of articles published in English	Which sources of feedback or support have been most useful to you in learning to write a scientific article?							
	Peer feedback	Reference books	Online resources	Language teachers	Other native speakers	Professor or supervisor	Other source of feedback or support	Total
0	0	0	0	2	0	12	0	14
1	1	0	0	1	1	5	0	8
2	2	0	0	2	2	1	0	7
3	3	0	0	0	0	2	0	5
4	1	0	0	2	0	0	1	4
5	1	0	0	0	1	1	0	3
6	1	0	1	1	0	0	0	3
7	0	1	0	0	0	0	0	1
8	1	0	0	0	0	0	0	1
Total	**10**	**1**	**1**	**8**	**4**	**21**	**1**	**46**

In the group of respondents who had already published four or more articles in English, only one cited their professor as the most important source of feedback. For this group, peers and language teachers seemed to be more important than supervisors, suggesting that having published several articles the scholars moved away from dependence on their supervisors and become increasingly autonomous.

Overall language teachers were cited as being the most important source of feedback by eight respondents, most of whom had published between one and four articles. However, the importance of language teachers to the feedback process again seemed to decline after the fourth published article. For the respondents who had already published more than four articles, peer feedback, online tools and reference books were the main source of feedback or support cited as important. From the group of scholars with five publications and more, only one chose language teachers as the most useful source of feedback. However, it is difficult to draw more detailed conclusions about the exact role of language training in this process as the questionnaire did not include a question about the amount of language training the respondents had previously received.

These findings are interesting in that they suggest the scholars with more experience placed a higher value on feedback from peers than did the novice scholars. The respondents with no published articles, tended to rank the feedback from 'experts' such as supervisors or professors as being much more important than feedback from peers. This finding fits with the often-cited apprenticeship view of writing development occurring within a community of practice in which feedback from supervisors and more-experienced peers helps to move novice scholars from the periphery towards fuller and more central participation in the socio-cultural practices of the discourse community (Lave and Wenger 1991: 29).

Conclusions

The findings from this small-scale questionnaire suggest that this group of German-L1 scholars is highly aware of the problem of writing reader-friendly texts and of the importance of different sources of feedback in learning to become more reader-friendly writers in English for publication. In particular, those scholars who had already published an article in English perceived writing reader-friendly text as being a major difficulty. For the less-experienced scholars who had not yet published an article in English, issues of grammar were uppermost in their minds.

Although the majority of the respondents showed a preference for 'expert' feedback from professors and supervisors, the more experienced scholars seemed to acknowledge the role of peer feedback in the process of learning to become a more successful scientific writer in English. Feedback from language teachers appeared to be important in a transitionary phase as novice scholars move away from dependence on their supervisors and become more autonomous L2 writers.

These findings lend support to the notion that learning to be a successful L2 scientific writer involves moving away from a dependency on expert feedback and learning to stand alone as an autonomous writer within a discourse community of peers.

Further research in the form of follow-up interviews with a representative sample of the respondents will investigate more precisely how different sources of feedback from supervisors, language teachers, and peers impacts on this group of multilingual researchers and helps them become more autonomous and reader-friendly scientific writers in English.

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