Article

Thesis Supervisors as Literacy Brokers in Brazil

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Abstract: In Brazil, as in much of the academic world, there is an increasing acknowledgement among scholars that their chances of having their research noticed by a geographically diverse scientific community increase when that research is communicated in English. At the same time, much like the majority of the world, the first language of Brazil is not English, which raises one question that heretofore has not been addressed in the context of that country: How do Brazilian scholars write their research articles in English? That question drove the initial phase of the exploratory study described in the present paper, and it is one that also led the authors to discover that one key agent in the publishing process in Brazilian academia is the dissertation/thesis supervisor. Questionnaire and interview data collected from students and supervisors at a Brazilian university suggest that student and lecturer alike see the need and value of specialized writing guidance, yet neither party seems to ascribe the role of “literacy broker” (a person who contributes to the development of a text intended for publication) to the thesis supervisor in any specific way. Pedagogical implications and directions for future research are discussed.

Keywords: ERPP; literacy brokers; supervisor

1. Introduction

It is now hardly controversial that English has established itself as the predominant language through which scholarly research is communicated around the world. For example, Hyland [1] reports that in 2015, English comprised approximately 95 percent of all articles in the Science Citation Index, a journal indexing service used worldwide. At the same time, what is equally clear is that pressures for academics to publish their research are not limited to geographic regions in which English is the dominant first language. Indeed, irrespective of nationality or mother tongue, scholars around the world generally aim to publish (lest they perish) in the most prominent and widely-recognized journals in their individual fields, and more often than not, that means publishing in English.

The challenges such scholars face, and the consequences those challenges cause, have been the subject of study for some time now, in what has been termed English for Research Publication Purposes (ERPP), considered a “branch of (English for Academic Purposes) addressing the concerns of professional researchers and post-graduate students who need to publish in peer-reviewed international journals” [2]. The seminal ethnographic work conducted by Flowerdew [3] among scholars in Hong Kong stands out as one of the first ERPP studies, with important findings, such as the preference for one-on-one tailored writing supervision over courses in EAP writing. Following Flowerdew, considerably more research on language assistance for non-natives of English who need to publish in that language has occurred in Asia, including, for example, in Japan [4], Korea [5], and China [6]. There has also been a considerable amount of research on ERPP and related issues in Europe since the Flowerdew [3] study, particularly in Spain [7–9]. What all the aforementioned
countries have in common is a university system that in many cases requires graduating students (especially at the doctoral level) to publish an article in an international journal as a condition to receive their diplomas. Such policy-driven pressures to publish in those countries spurred a need to quickly develop resources and systems to increase the success with which an article can be written for publication in English.

One area of importance in ERPP that has risen to the fore is that of what Lillis and Curry [10] have termed “literacy brokers”, or individuals in the publishing process who influence the outcomes of research articles “in different and important ways”. For example, in their study involving 12 Chinese science students, Li and Flowerdew [11] found that participants most commonly turned to their supervisors, peers, language professionals, and editorial services for help when developing their writing in English. Literacy brokers are therefore those parties who have a role (enlisted or otherwise) in helping shape a manuscript prior to submission, and can also be those who become involved post-submission, such as editors and reviewers. Kamler [12] points out that it is in this phase—what happens after an article is submitted for publication—that relatively inexperienced scholars (such as students) can feel overwhelmed, and the help of what Kamler terms a “publication broker”—most typically the supervisor—can be particularly important in navigating the complexities of how to handle reviewer comments.

In either case (literacy broker or publication broker), the thesis and dissertation supervisor has stood out as having a particularly pivotal role in the process of a novice researcher becoming a published researcher. For example, in a study involving six science graduate students in Australia, of the 13 total articles those scholars had produced, all 13 had been written in co-authorship with a supervisor [13]. Lavrière [14], in the context of Quebec, found that around a third of all scientific production from that region was attributable to doctoral student authorship, especially in co-authorship with their supervisor (in particular in the disciplines outside the humanities and social sciences). In short, the supervisor clearly stands out as the person who can (and often does) most directly exert influence over the publishing success of a more novice researcher.

At the same time, there is evidence that supervisors do not see themselves as developers of future academic authors. In a survey of 29 supervisors in Australia, Caterall and colleagues [15] found that only one respondent actually identified “writing help/guidance” as the role of supervisors. In that same Caterall et al. study, supervisors in focus group interviews reported that they often simply take “ownership” of their students’ writing, blaming time pressures. Part of the problem may be that supervisors sometimes report not having ever been explicitly taught themselves, and therefore feel they lack the expertise to assume the role of literacy broker [15,16].

The study of literacy brokering is still a relatively new one, and even more so in areas outside of Asia and Europe. Brazil, the largest country and economy in South America, has only relatively recently begun to attach publication in international journals as a requirement for degree completion (at both the master’s and doctoral level), in part because of national pressures to become more competitive in global league tables, where the impact of Brazilian scholarship has remained stagnant for at least a decade [17]. Hence, while it is widely known that Brazilian university researchers and post-graduate students feel increasing pressures to publish in top-notch (mostly English-language) scientific journals, the phenomenon has outpaced critical research into it to try and better understand it (for example, how it compares with other countries).

The current research was therefore driven by one main question: How do Brazilian scholars go about publishing their research in English? The results of that exploratory study are reported below, and one particular finding—that of the pivotal role of dissertation/thesis supervisor as literacy broker—is highlighted with possible pedagogical implications.

2. Materials and Methods

The present research was carried out over a full academic year within the Department of Mechanical Engineering in a public university in the south of Brazil. This particular department
was chosen as the focus of this initial exploratory study for a number of reasons, including underperformance in the production of published research articles (relative to other areas, including other engineering departments), and because the second author had been recently charged with the task of improving the “internationalization” of the department, including international research publication.

In order to recruit participants, the authors sent out a departmental email inviting (separately) postgraduate students and university lecturers to attend a brief information seminar to talk about a new initiative to help those parties in their ERPP efforts. The people who attended the seminars and wished to receive help were asked to complete a questionnaire (Appendix A) intended to gather data about participants’ existing experience in and attitudes toward publication as a condition of any support (e.g., help in redrafting a manuscript) they would receive. A total of 34 questionnaires (in Portuguese) were sent out electronically using Google Forms, and of those, 26 were eventually returned, with students and lecturers evenly represented (13 student respondents, 13 lecturer respondents).

Once questionnaires were returned, respondents were invited to attend an interview in order to start the process of helping them with their manuscripts. Semi-structured interviews (based on responses on the questionnaire) were then conducted among university lecturers \( n = 6 \) and postgraduate students \( n = 4 \) with the intention of fleshing out and delving further into answers provided on the survey instrument. “Text histories” \[12]\ (i.e., manuscript drafts and any correspondence with literacy brokers and/or journal editors and reviewers) were also elicited from participants prior to the interviews.

All interviews were transcribed and coded for emerging themes. The codes emerged through a process of open, then axial coding \[18]\ of the Portuguese transcripts by both researchers, who read through all transcripts independently. In the open coding phase, the key words and phrases were annotated directly on the transcript (Word) documents as comments. The comments were then printed separately by each researcher and compared. At that stage, a more collaborative axial coding occurred, once again examining the transcripts for connections between comments made around the categories identified during open coding. Before refining to a finalized version of the coding (selective coding), all transcripts (in Portuguese) were converted into “.txt” (text only) documents and uploaded into a corpus linguistic concordancer (AntConc 3.3.5), and a word-frequency list was generated of the entire transcript corpus. This frequency list was examined for any other key words in Portuguese that may have been missed in the qualitative phases by the researchers, but ultimately did not yield any additional coding value.

3. Results

Below we report on the highlights of each source of data, focusing first on the results from the 26 participants that responded to the online questionnaire, and then exploring those data further through the interview and text history data of 10 participants who sought out help on their writing.

3.1. Questionnaire

One of the key areas of data the instrument aimed to extract was what resources Brazilian scholars draw on when drafting research articles in English, and a summary of the results is presented in Table 1.

Table 1 shows that the help-seeking habits of these Brazilian respondents are consistent with those reported by Li and Flowerdew \[11]\, in which participants reported using resources that were most easily accessible first before seeking out paid or less readily available sources.

The questionnaire was also designed to explore publishing background and the extent to which participants worked alone or collaborated with others when trying to publish. For example, one item asked respondents to indicate the authorship of their first successfully published research article, and if it was with another author, what the relationship of that other author was to the respondent. What stood out as a clear trend among respondents who had already written their first research article
was that the dissertation/thesis supervisors are frequently the ones who escort apprentices through the gateway into the world of successfully published academics (Table 2).

Table 1. Resources reported as used by participants when drafting research articles in English.

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>% USE (at Least “Sometimes”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dictionary</td>
<td>73.1</td>
</tr>
<tr>
<td>Brazilian English-speaking colleague</td>
<td>42.3</td>
</tr>
<tr>
<td>Translation service</td>
<td>34.6</td>
</tr>
<tr>
<td>Editing service</td>
<td>23.1</td>
</tr>
<tr>
<td>Brazilian English teacher</td>
<td>15.4</td>
</tr>
<tr>
<td>Specialized writing course</td>
<td>11.5</td>
</tr>
<tr>
<td>Native English teacher</td>
<td>7.6</td>
</tr>
<tr>
<td>Foreign colleague in Brazil</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Table 2. Responses to questions on authorship on first publication.

<table>
<thead>
<tr>
<th>First Authorship</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>My first publication (in Portuguese or English) was/will be written by me as sole author.</td>
<td>7.70</td>
</tr>
<tr>
<td>My first publication (in Portuguese or English) was/will be in coauthorship with fellow colleagues.</td>
<td>26.90</td>
</tr>
<tr>
<td>My first publication (in Portuguese or English) was/will be in coauthorship with my thesis advisor.</td>
<td>53.8</td>
</tr>
<tr>
<td>My first publication (in Portuguese or English) was/will be in coauthorship with foreigners at this university.</td>
<td>11.5</td>
</tr>
<tr>
<td>My first publication (in Portuguese or English) was/will be in coauthorship with foreigners abroad.</td>
<td>7.7</td>
</tr>
</tbody>
</table>

However, the responses to a different item (answered only by those who had already published at least once) on the same questionnaire seemed to—at first glance—conflict with the data in Table 2.

Taken together, what can be gleaned from the data in Table 2 versus the responses in Table 3 is that, while the supervisor stands out strongly as the person who most commonly brokers the publishing of students’ first papers, the supervisors are not necessarily focusing on developing scholars that will publish autonomously without their direct intervention. As shown in Table 3, although there is evidence that the thesis advisor does make it a point to help the supervisee develop her/his writing skills in many cases (23.10%), a much larger percentage of respondents (76.90%) indicated that they feel that they still do not know how to write research articles, or that they somehow learned by themselves. In the interview phase of the research (below), much of the follow-up questioning was directed at trying to better understand the underlying cause of this apparent discrepancy.

Table 3. Reported apprenticeship of the research article genre.

<table>
<thead>
<tr>
<th>How Did You Learn to Write Research Articles?</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I never learned—I still do not know how to write research articles.</td>
<td>15.4</td>
</tr>
<tr>
<td>No one taught me—I learned by myself.</td>
<td>61.5</td>
</tr>
<tr>
<td>In a specialized course offered by my department.</td>
<td>3.8</td>
</tr>
<tr>
<td>In a specialized course offered outside by department, but by the university.</td>
<td>0</td>
</tr>
<tr>
<td>In a classroom-based course offered outside the university.</td>
<td>3.8</td>
</tr>
<tr>
<td>In a course delivered online.</td>
<td>3.8</td>
</tr>
<tr>
<td>My thesis advisor taught me.</td>
<td>23.1</td>
</tr>
</tbody>
</table>

3.2. Interviews

This section takes a closer look at the interview data provided by the participants, divided into three especially salient themes that emerged from those data: appropriation, guidance, and resources. (All comments have been translated from the original Portuguese, following the coding procedure described in Section 2.)
3.2.1. Appropriation

As explained in Section 3.1, a particularly interesting area for further investigation was identified in looking at the number of respondents that reported their supervisor as co-author on their first publication (Table 2), in contrast to the number of respondents who said that they still did not feel they knew how to write research articles (Table 3). The following comment from one of the respondents (translated from Portuguese) can be said to be representative of what all university lecturers (n = 6) reported:

“She (the supervisor) liked my alloy and saw that it had potential to be published. I didn’t know how to write an article, I just was focused on my research. So she took my data, wrote the article, put my name on it and sent it to the journal. I still don’t know how to write, in reality” (Supervisor “Adam”).

While no two researchers interviewed reported exactly the same issue, some form of “appropriation” (apropriar-se in Portuguese) of supervisee’s work was always recounted. For example, in one case the interviewee related how her supervisor had helped her with the method section of the article, but everything else “was totally redone by him until it was no longer my paper”. In the case of another professor, the first draft of the article was written and submitted by him and his colleagues, but when the journal replied with a request for revision, the supervisor “kidnapped” the original article, changed everything himself, and resubmitted it himself. One participant, who is also a supervisor himself, added that he was also guilty of this practice of appropriation, attributing it to issues of time:

“Look, I have seven supervisees—five of them doctoral—and if I wait for the student to deal with it... I know it’s not ideal, but the student, he needs to graduate, so what is there to be done? Maybe there should be a course or something like that, but I can’t do it all alone” (Supervisor “Barry”).

The last element of Barry’s comment, that of resources that could help, will be revisited in section.

3.2.2. Guidance

The four postgraduate students that were interviewed still had not managed to publish their first article since they were still finishing their doctorates, but there was evidence in their discourse of a similar issue among them to the one reported among the published professors, vis-a-vis their supervisors. For instance, while one student did report receiving support from her supervisor (who had even bought a book on how to teach the research article genre), the other three all complained of feeling “abandoned” with the supervisor in each case being difficult to reach, and when they did offer any kind of feedback on writing, it was mainly restricted to the method and results sections:

“Yes, the supervisor gives feedback on the work, but, it’s like, ‘redo this table’ and ‘add this reference’ [...] We are never sure if the writing is really good or not” (Student “Mary”).

One supervisor, Barry, helped provide some insight into why this lack of writing guidance may sometimes occur:

“It’s a vicious circle: I never learned from my supervisor, I just do it and hope it works. Sometimes it does, sometimes the journals really trash (the manuscript). But if I don’t know why sometimes it’s good, how can I explain it to my advisees?”

3.2.3. Resources

The broad category of “resources” included participants’ comments on literacy brokers, and also opportunities to learn how to write better. Regarding the former, a student participant remarked how the pressure to publish in high-impact journals must be reconciled with the resources at students’ disposal:
“We have to publish in good journals, and in our area they are all in English. We only have one bullet in the gun to get the article published because when we send the article it can take months until we have an answer from the journal, and in the meantime we need to graduate and we can’t if we don’t have the acceptance letter. The specialized (editing) businesses are very expensive, so on this article, one of the authors had a friend who is Brazilian but is an English teacher. She charged us two-hundred reais to do the translation. We took up a collection (among the lab members) and got it translated” (Student “Diego”).

It should be noted that this student’s answer was in response to the question of who had done the translation, and why that person had been chosen because, as was made aware to the student, the translation was riddled with errors of vocabulary, grammar, and spelling.

Beyond resources in terms of access to literacy brokers (and the financial resources to hire their services), another frequent comment that was made concerned the lack of availability of courses and similar services to help one develop better writing for publication. As one participant (“Mary”) noted:

“I try—we all apply ourselves—very hard. But there’s no course; the university doesn’t help. Yes, there’s a book, there’s a video... but these are unsystematic and, anyway, it is not the way I learn. There should be a course for us, from the beginning of our degree. No I’m going to graduate and I still don’t know how to write”.

4. Discussion and Conclusions

The original aim of the present study was simply to better understand what Brazilian scholars go through when trying to publish research articles in English. Through questionnaires and semi-structured interview data, one finding in particular—that of a key role for the supervisor—was identified. What was clear from both the questionnaire and interview data, from both lecturers and students, was that participants feel pressured to publish in English, but at the same time there is little to no institutionalized support for research writing (in either Portuguese or English). These findings are generally consistent with the extant relevant research conducted in other countries.

The finding of the role of the supervisor as being an important one is also consistent with existing literature [19,20]. However, what has not yet been as widely reported in the ERPP research to date is the extent to which the role of the supervisor is conducive to the fostering of publishing scholars beyond the supervisor–student relationship. To that extent, the research reported here contributes to furthering insight into that relationship, and is consistent with Lei and Hu’s recent study in China [21], in which a similar proportion of participants (only 2 of 11 supervisees) reported any sort of systematic publishing guidance by supervisors.

What stood out as arguably most interesting from the interview data was an apparent awareness among supervisors that they should take on a greater role as literacy broker—yet they do not know how, and generally feel that instruction related specifically to writing is best handled by a specialist. Part of the problem (as evinced through Barry’s comment) is pressure in general (the constant pressure to publish), and time pressure in particular. This dilemma around pressures and their effects on writing supervision has been reported elsewhere in the literature [22], with similar accounts of a supervisor who essentially usurps authorship owing to those pressures. However, there seemed to be a kind of resentment among those in the present study who have had their writing “kidnapped” by their supervisor, since that act was viewed by many as detrimental to their growth as autonomous writers. At the other end of spectrum were reports of supervisors who were too hands-off, with their students often reporting feeling left to their own devices (e.g., seeking out translators on the cheap), and those devices were also not viewed as conducive to long-term writing development.

Although this research was intended to be exploratory in nature, a picture emerges of interests that are actually aligned—interests of both student and supervisor. The supervisor often seemed to be aware that the student needed help beyond just commenting on method and results sections, and the student aware that more help was needed. Yet, interestingly, none of the participants in this study
mentioned the supervisor her/himself potentially taking on the role of literacy broker. There seemed to be interest among students in particular for help in the form of specialized courses; however, could a course be devised not for the students, but the supervisors—to learn how to enhance and systematize their literacy brokerage? While there was limited evidence in the interview questionnaire data that some supervisors do make an effort to support their students’ writing, a question remains regarding the extent to which those efforts are in any way systematic (i.e., by pedagogic design), and of what that helps consists exactly. Many comments among the data suggest that lecturers do possess various levels of tacit knowledge of how to structure and publish an article (as exemplified by those supervisors who “appropriated” their students’ papers to expedite the publishing process), but perhaps lack the kind of explicit knowledge to be able to instruct others [23]. A suggestion for future research, therefore, is the development of a pedagogical intervention that can help supervisors build an awareness of what attributes contribute to articles getting published, and how they can help to integrate practices that are conducive to aiding students in getting their work published—and then follow-up with students and supervisors regarding the perceived successes and issues of that intervention. It is further suggested that such training should avail itself of focus groups and other methods to try to tap into the existing practices of supervisors who currently do make it a point to assume the role of literacy broker for their students in various ways. Looking more closely at what ERPP practices (purposeful or otherwise) supervisors already adopt within particular contexts (e.g., within a particular university, even within a particular department within that university) seems much more contextually valid than trying to make one-size-fits-all solutions fit wholesale.

The bottom line is that, at the moment, it seems there is a kind of vicious circle that is prevalent in the supervisor–student dynamic. That vicious circle involves many supervisors who do not feel confident about their own writing because they feel they have never learnt, and who therefore also do not feel it is their place to try to develop the writing of their students. Perhaps that circle can be broken by way of pedagogic strategies such as specialized training for supervisors, or perhaps there is some other solution—what matters is that somehow that circle should be broken.

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Author Contributions: The first author was chiefly responsible for the design of the research, data collection and analysis. The second author assisted in the development of the questionnaire and in key aspects of the interview process.

Conflicts of Interest: The authors declare no conflict of interest.

Abbreviations
The following abbreviations are used in this manuscript:

ERPP  English for Research Publication Purposes

Appendix A. Sample of the Questionnaire Administered to Students and Supervisors
Study on the publication of academic articles in English

Instructions
This questionnaire is the first step in order to get access to the help that will be given by the researcher who will work with you on your articles in English. This service will be free, but only offered once the questionnaire has been completed in full. Once it has been electronically returned to the researcher, he will get in touch in due course in order to request more materials (for example, the article to be revised), and a suggested date and time in order to arrange a personal consultation.
1. Your publication experience (you may choose more than one option)
   i Portuguese
      (a) I have published a journal article before in Portuguese.
      (b) I recently submitted an article in Portuguese, and have received a request to revise.
      (c) I have tried to publish in Portuguese, but the article was rejected.
      (d) I am currently writing an article in Portuguese.
   ii English
      (a) I have published a journal article before in English (....)
   iii Collaboration
      (a) I have never published, nor do I have an article to submit (You may skip the rest of this question).
      (b) My first publication (in Portuguese or English) was/will be written by me as sole author. (....)

2. How you learned (you may choose more than one option)
   i How did you learn to write research articles in Portuguese?
      (a) I never learned—I still do not know how to write research articles. (....)

3. Writing support
   i How often have you used the following sources of support to write an article in English? (1 = NEVER; 2 = HARDLY EVER; 3 = A LITTLE; 4 = SOMETIMES; 5 = OFTEN; 6 = ALWAYS)
      (a) Dictionary. 1 2 3 4 5 6
      (b) Grammar guide. 1 2 3 4 5 6
      (c) Brazilian colleague. 1 2 3 4 5 6
      (d) Brazilian teacher of English. 1 2 3 4 5 6
      (e) Native speaker English teacher. 1 2 3 4 5 6
      (f) Specialized course. 1 2 3 4 5 6
      (g) Foreign colleague abroad. 1 2 3 4 5 6
      (h) Foreign colleague in Brazil. 1 2 3 4 5 6
      (i) Translation service. 1 2 3 4 5 6
      (j) Paid editing service. 1 2 3 4 5 6
   ii What is the likelihood of you using those sources now or in the future? (1 = HIGHLY UNLIKELY; 2 = UNLIKELY; 3 = POSSIBLE BUT NOT LIKELY; 4 = LIKELY; 5 = HIGHLY LIKELY; 6 = DEFINITELY)
      (a) Dictionary.... 1 2 3 4 5 6
   iii Rank the usefulness of the sources of support (1 to 10, with 1 being the most useful and 10 the least useful). For example, if you think the most useful source of support is “dictionary”, write “1” next to it.
      (a) Dictionary. (...)

4. Your views on publishing

i Give your opinion on the following statements. (1 = DISAGREE; 2 = AGREE SOMEWHAT; 3 = AGREE; 4 = STRONGLY AGREE)

(a) I know how to write articles well in Portuguese. 1 2 3 4
(b) I know how to write articles well in English. 1 2 3 4
(c) I want to publish in English because it gives me more prestige. 1 2 3 4
(d) I feel pressured to publish in English. 1 2 3 4
(e) Publishing in English affords my research greater visibility. 1 2 3 4
(f) I think the global preference for English is unfair. 1 2 3 4
(g) If I could, I would publish only in English and not in Portuguese. 1 2 3 4
(h) The greatest barrier to publishing in English is my proficiency. 1 2 3 4
(i) Native speakers have an easier time writing articles in English. 1 2 3 4
(j) The peer reviewers are unfair when they criticize articles for reasons of language. 1 2 3 4
(k) It is ideal to publish in an American or British journal. 1 2 3 4
(l) Publishing in English is important for the advancement of Brazilian science. 1 2 3 4
(m) Before sending an article to a Brazilian journal, I prefer to try a foreign one first. 1 2 3 4
(n) The university should offer more publishing support. 1 2 3 4

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