

English *versus* Native Languages in Humanities and Social Sciences Publications: Time Evolution, Choices and Geopolitical Issues.

Edmilson Manganote¹ and Peter Schulz²

¹*mangano@ifi.unicamp.br*

Instituto de Física Gleb Wataghin, UNICAMP, CX.P. 6165, 13083-970, Campinas (Brazil)

²*pschulz@ifi.unicamp.br*

Instituto de Física Gleb Wataghin and Coordenadoria de Centros e Núcleos Interdisciplinares de Pesquisa (COCEN), UNICAMP, 13083-970, Campinas (Brazil)

Abstract

In this paper we discuss the language option used in indexed publication in non anglophilic countries, according to the knowledge field. Initially, as expected from various preceding studies, we see the overwhelming use of English in most fields. The scenario becomes more involved in social sciences and humanities, particularly when other publications items than articles are considered. Here we focus on book reviews published in journals indexed in the Web of Science from ISI Thomson-Reuters. Furthermore, within this scenario different countries show different time evolution of language choice in the elected publication class (book reviews). These time evolutions, sometimes favoring English against native languages, seem to be influenced by a variety of factors.

Introduction

Each area of knowledge presents specific characteristics in the process of publicizing the research results. Understanding these characteristics refers us to an issue of growing interest, namely the use of traditional bibliometric indicators to evaluate performance and quality of the research undertaken. An approach to this question needs a comprehensive discussion of research area related publishing habits. A starting point to the subject is the analysis of qualitative differences between researchers in different fields concerning publication (language used, type of publication, and target audience - not examined here - and involvement with publishing activity) thoroughly investigated by the DFG (Deutsche Forschungsgemeinschaft) among members of the scientific community in Germany, (DFG 2005). This report shows evidences that in some areas there is a legitimate interest in reaching a national and not an international audience (in this DFG survey the question if the research is aimed to a foreign peer audience, revealed positive answers for 92,4% in natural sciences but only 43,3% in humanities) but with strong records of information exchange established and demonstrated by citations not captured by international databases.

The most established international database for bibliometric research is the Web of Science provided by ISI Thomson-Reuters, a database covering mostly scientific journals and not other forms of publications (like books or book chapters). This limitation in the coverage has been convincingly exposed for the Australian scientific community by Linda Butler, who demonstrated the necessity of moving beyond journal outputs for the assessment of research production in various fields (Butler, 2008): while books and book chapters represent less than 3% of the publication output for Chemical Sciences in Australia, in History these publication categories sum up to 45 %.

The interest in local instead of an international audience in certain research areas has been thoroughly investigated by Brazilian scientometricists, focusing international versus national oriented Brazilian journals in general (Meneghini, R., Mugnaini, R. and Packer, A. L., 2006) or addressing a specific area, like psychiatry, in which the overwhelming majority of the articles were published in domestic journal in the period considered by the authors (Figuera, I., Jacques, R., and Leta, J., 2003).

A central question is the language barrier that can be posed by borrowing the title of a recent paper by Meneghini and Packer: *Is there science beyond English?* (Meneghini, R. and Packer, A.L. 2007). Visibility and quality control of domestic publications are increasing with the efforts of regional databases, like the Brazilian Scielo database. Indeed, it should be noticed that movements towards including regional oriented journals have been launched recently even by ISI Thomson-Reuters.

In the present work we address the possibility of capturing differences in language use trends and publication beyond journals, using the very Web of Science as database, in spite of the identified coverage limitations mentioned above. A benchmark for our study is the analysis of language use in international research by Garfield and Welljams-Dorof (Garfield, E. Welljams-Dorof, A. 1990) including now Portuguese in this scenario.

Methodology

We did searches using the search and analysis tools available to every user of the Web of Science. We asked for the total amount of publications per year having a selected country as address of at least one of the authors. Initially we selected the following non English speaking countries: Argentina, Belgium, Brazil, Finland, France, Germany, Portugal, Spain and Sweden. Two publication types, articles and book reviews, were inspected as a function of leading research fields in the outputs and language of the publication. The working hypothesis is that book reviews in indexed journals is an indirect measure of the importance of books and book chapters as research output. The language used in the publications, albeit the coverage limitations beyond English, indexed in the Web of Science reveals to be an interesting qualitative indicator. The period chosen for this study spans from 1985 to 2008. The choice of the countries was based on the following criteria: representative countries of demographically important official languages and former scientific leading languages (France and Germany), a representative country of a language of increasing penetration (Spain), small countries with well developed research systems (Belgium, Finland and Sweden) and emergent scientific leaders in South America (Argentina and Brazil).

Results

The first qualitative result is the perception that books and book chapters are important outputs in Social Sciences and Humanities. Searching the indexed publication records of the different countries mentioned above, it is unambiguous that the leading research areas having articles as output are listed in the Science Citation Index (SCI, hard sciences in the ISI notation), while Book reviews are leaded by areas in the Social Sciences Citation Index or Arts and Humanities Citation Index (SSCI and AHCI, respectively). If, on one hand, English is the language used in over 90% of the articles, on the other hand, the scenario is quite different for book reviews: native languages of some non English speaking countries are the preference. Some of our results are summarized in a set of figures showing the number of book reviews published per year, having the mentioned countries as at least one of the addresses. The observed behavior is different for each country. In Figure 1 we see the trend of Portuguese compared to English in Brazil. One clearly sees a transition from Portuguese to English during the 90s. The reasons of such transition are still beyond the scope of our data, but it is interesting that such transition is not observed in Argentina, Figure 2.

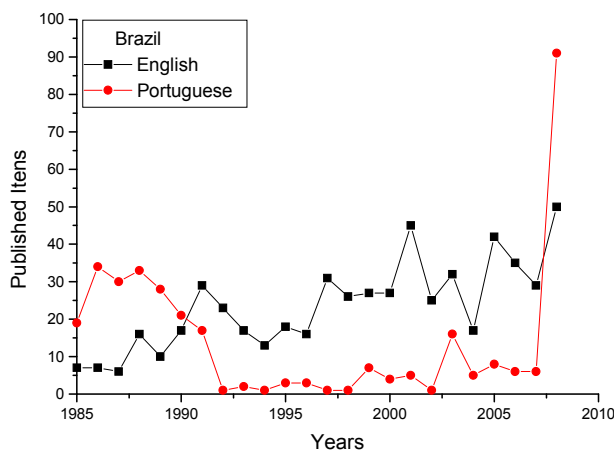


Figure 1. Number of published book reviews, having Brazil as an address, as a function of the publication year. Publication languages: English (black squares) and Portuguese (red diamonds).

However, a hint is given by the sudden rise in book reviews published in Portuguese during 2008. It is worth noting that for Brazil, although the important increase in number of indexed articles in the last 20 years, the number of book reviews in indexed journals remained stable in this period with the exception noticeable in 2008. Brazil is an emergent scientific nation, showing a good rank evolution among world's 20 most publishing countries (Glaenzel, W. Debackere, K. Meyer, M. 2008). On the other hand, the recent inclusion of several domestic journals in the ISI databank gives rise to a possible new visibility of a domestic oriented production (Meneghini, R., Mugnaini, R. and Packer, A. L., 2006). Argentina, however, shows a steady increase of this type of publication with no clear predominance of English, when compared to Spanish.

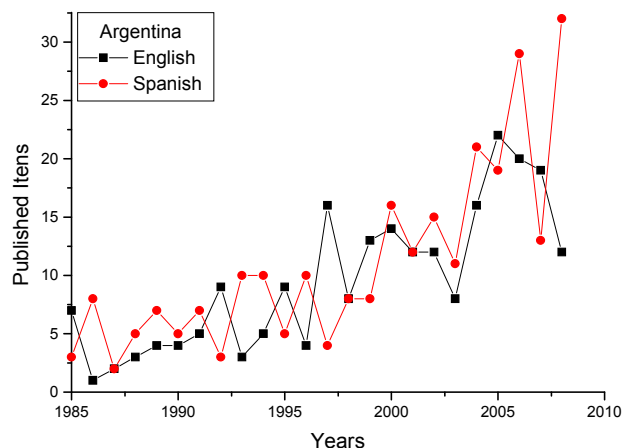


Figure 2. Number of published book reviews, having Argentina as an address, as a function of the publication year. Publication languages: English (black squares) and Spanish (red circles).

For Germany, Spain and France, former colonial empires, one can observe either a clear predominance of mother language (France) to a more equilibrated share between English and the mother language reached only in the past few years (Germany). On the other, for Portugal, also a former empire, this feature is not found and English is the dominant language. An illustration of the mother language predominance case is shown in Figure 3, depicting the situation in France with a very slow increase of book reviews in English.

In the case of Finland and Sweden, the native languages are used primarily in non-academic communication. In all research areas we observe a clear predominance of the English language.

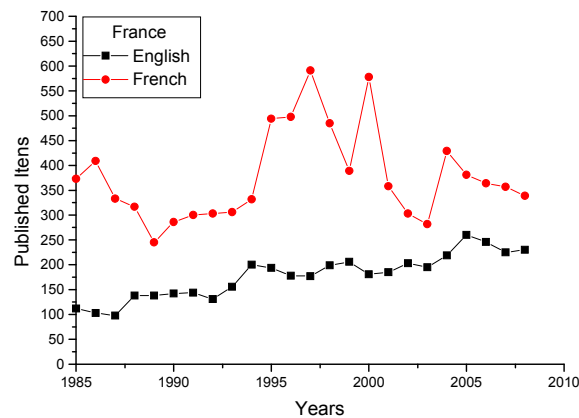


Figure 3. Number of published book reviews, having France as an address, as a function of the publication year. Publication languages: English (black squares) and French (red circles).

Belgium, nevertheless offers us an interesting view, Figure 4. Twenty years ago, three languages were equally important: English, French and Dutch. Over the years, Dutch and French are losing influence, while English started to prevail in beginning of this century. The process of losing influence is more pronounced for Dutch, while the production of book reviews in French shows important fluctuations with and increasing tendency over the last years.

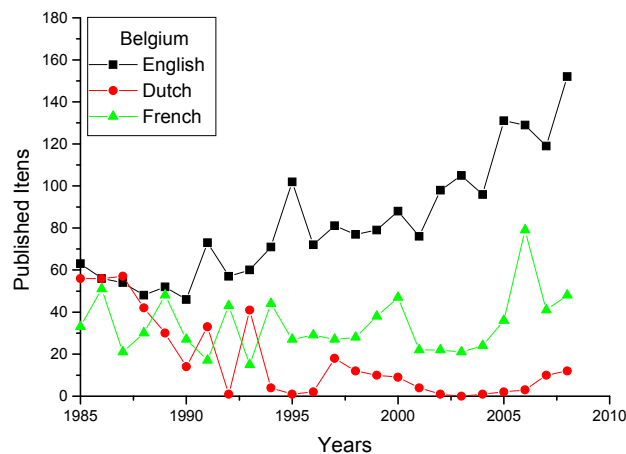


Figure 4. Number of book reviews, having Belgium as an address, as a function of the publication year. Languages: English (black squares), Dutch (red diamonds) and French (green triangles).

Conclusions

Although preliminary, the present results suggest potentially interesting views. First, looking for the area and language profile of book reviews indexed in the Web of Science reveals strong evidences of the kinds of coverage limitations, suggesting the importance of alternative databases for evaluating the research outputs of different research fields.

Besides that, there is indeed "science beyond English", as can be captured even by surveying a still English biased database like the Web of Science.

In this context it is worth mentioning that the visibility of Portuguese as a scientific language (at least marginal) exists due to the publication profile of Brazil not of Portugal. In previous works on language use (Garfield, E. Welljams-Dorof, A. 1990), based on 1984 ISI source items, Portuguese is not even included, since the total output has been below the 6000 items threshold considered: Brazil (3212) and Portugal (495). The output of the other 8 Portuguese speaking countries was even lower. From the source items in 1984, 538(12) were published in Portuguese having at least one address in Brazil(Portugal), a share of native language use of 17% in Brazil and only 2,4 % in Portugal. In 2008, having Portugal as an address, Web of Science counts 9761 items with only 150 in Portuguese, 1.5%. On the other hand, in 2008, having Brazil as an address, Web of Science counts a total of 35,364 items, 6,448 of them in Portuguese, a share of 18%. It should be noticed that this rather impressive performance of the Portuguese language is probably due to the recent indexing of several regional Brazilian journals. The share of Portuguese in recent years reached approximately 5% (still more significant than in Portugal).

In Summary, these various trends revealed, for instance, by the behavior difference between Brazil and Argentina, or the different tendencies of the use of the native languages in Belgium, suggest interesting starting points for future works on perceiving the evolution of field dependent publication habits using indirect measures in established databases.

References

- Butler, L. (2008), ICT assessment: moving beyond journal outputs, *Scientometrics* **74**, 39-55.
- DFG (2005) Publishing Strategies in transformation – results of a study on publications and information acquisitions with regard to open access. On line edition released by the Deutsche Forschungsgemeinschaft: www.dfg.de/en/dfg_profile/facts_and_figures/
- Figuera, I., Jacques, R. & Leta J. (2003), A comparison between domestic and international publications in Brazilian psychiatry, *Scientometrics* **56**, 317.
- Glaenzel, W., Debackere K. & Meyer, M. (2008), "Triad" or "tetrad"? On global changes in a dynamic world, *Scientometrics* **74**, 71.
- Garfield, A. and Welljams-Dorof A. (1990), Language use in international research: a citation analysis, *Annals of the American Academy of Political and Social Science* **511**, 10.
- Meneghini, R., Mugnaini, R. & Packer, A.L. (2006). International versus national oriented Brazilian scientific journals. A scientometric analysis based on Scielo and JCR-ISI databases, *Scientometrics* **69**, 529-538.
- Meneghini, R. & Packer, A. L. (2007), Is there science beyond English?, *Embo reports* **8**, 112.