Je veux bien, mais me citerez-vous? On publication language strategies in an anglicized research landscape1

Nadine Desrochers[*] and Vincent Larivière[* **]

[*]nadine.desrochers@umontreal.ca; vincent.lariviere@umontreal.ca
École de bibliothéconomie et des sciences de l'information, Université de Montréal, C.P. 6128,
Succ. Centre-Ville, Montréal, Québec, H3C 3J7 (Canada)

[**] Observatoire des Sciences et des Technologies (OST), Centre Interuniversitaire de Recherche sur la Science et la Technologie (CIRST), Université du Québec à Montréal, CP 8888, Succ. Centre-Ville, Montréal, Québec, H3C 3P8 (Canada)

ABSTRACT

The pressure to publish in science's lingua franca is linked to a common belief that this choice will cause the research to be more readily indexed, accessed, read, used, and cited. However, the use of a national language can be marketed as a source of distinction for institutions located in countries or nations where English is not the primary language. This study looks to understand publication-language practices in the social sciences and humanities by examining the publication strategies of three nations, including a stateless nation: Germany, France, and Québec. The data were extracted from the Social Sciences Citation Index and the Arts & Humanities Citation Index and comprise 3.7 million articles, notes and reviews published between 1980 and 2014. The rise of English and decline of other languages is staggering and follows the same tendency in Germany and France, reaching just over 80% in each case. Québec differs slightly because the percentage of papers published in English was already quite high in 1980; nevertheless, the proportion has also risen, now reaching over 90%. Impact follows suit: for each of the three nations, papers published in English gather, on average, three times as many citations as they national-language counterparts. Given the reign of impact indicators and the symbolic capital granted to citations in the current scientific context, the data reveal that opting for English-centric publication strategies pays off. However, this raises questions fundamental to science, the symbolic capital associated with language, and the effects of language-based strategies on research.

INTRODUCTION

In countries where the national or predominant spoken language is not English, "publish or perish" has a twist: "publish in English or perish". However, for institutions located in such countries or nations, the use of the national language can be marketed as a distinction. For example, the Université de Montréal's website states that it is "la seule université *francophone* canadienne à figurer parmi les 150 meilleurs établissements universitaires dans tous les classements internationaux" (Université de Montréal, n.d.; emphasis added). Furthermore, schemes established by funding agencies often prioritize local societal impact, in the social sciences in particular. However, the question of whether this translates into actual symbolic capital for researchers remains unanswered. This study looks to understand publication-language practices in the social sciences and humanities; for while a researcher's national affiliation may be the result of a lifelong series of events, what to study, where to publish, and in what language are all, ultimately, choices.

BACKGROUND

One of the problematic concepts in studying the anglicization of science is that of the "internationalization" of publishing venues. For instance, Buela-Casal, Perakakis, Taylor and Checa (2006) concluded that, at least in psychology, « no single criterion provides an unequivocal measure of internationality » (p. 60). Other studies have looked at researchers' perceptions of the migration towards English as the international language of science. Gnutzmann and Rabe's (2014) qualitative analysis showed a mix of perceptions within the group of 24 German researchers interviewed. Schubert and Michels (2013) looked at the scientific impact of papers published by "large publisher nations" and found a parallel of the Mathew effect (Merton, 1968) for journals (see also Larivière and Gingras, 2010).

It is quite plain to see that the internationalization of the objects of study in the natural and medical sciences (NMS; Gingras and Mosbah-Natanson, 2010) has been accompanied by a gradual but undeniable migration towards English. The fact that these objects retain their intrinsic proprieties from one country to the next allowed these fields to fully embrace an internationalization of the dissemination of science (see Kirchik, Gingras and Larivière [2012] for a study of the effects of this in the Russian context). In fact, more than 98% of peer-reviewed documents in the NMS published in 2014 and indexed in WoS were in English.

On the other hand, objects of study for the social sciences and humanities (SSH) tend to have a more local focus (Warren, 2014). This leads us to ponder the symbolic capital (Bourdieu, 2001) that could—or perhaps that should—be given by institutions and policy makers to the dissemination of research in national languages.

Three nations, including a stateless nation, will be studied here in order to shed some light on the underlying tensions in publication strategies in the SSH: Germany, France, and Québec.

METHODS

The data were extracted from the Social Sciences Citation Index and the Arts & Humanities Citation Index of the WoS, which index 3,500 SSH journals. The dataset comprised 3.7

million articles, notes, and reviews (henceforth, "papers") published between 1980 and 2014[2].
Three variables were considered:

1. Country of affiliation of the first author;
2. Place of publication of the journal, established by the city provided in the address;
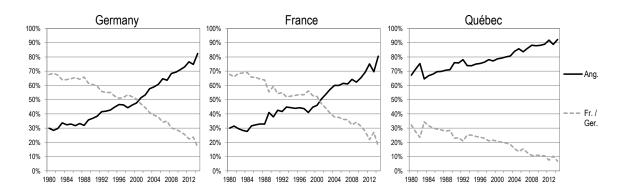3. Language of the paper.

Scientific impact was obtained by using the number of citations received, normalized by year and by the journal's discipline.

RESULTS

As shown in Figure 1, the rise of English and decline of national languages is staggering and follows the same tendency in Germany and France: currently, more than 80% of papers from these countries indexed in WoS are written in English, from roughly 30% 35 years ago. Less than 20% are being published in the national languages of German or French. Québec differs slightly because the percentage of papers published in English was already quite high in 1980; nevertheless, the proportion has also risen, now reaching over 90%. In absolute numbers, the dataset contains, for the most recent year (2014):

*   For Germany: 8,644 papers in English and 1,718 papers in German;
*   For France: 4,259 papers in English and 905 papers in French;
*   For Québec: 1,986 papers in English and 147 papers in French.

Figure 1. Percentage of papers in the social sciences and humanities written in English,
German (for German) and French (for France and Québec), 1980-2014
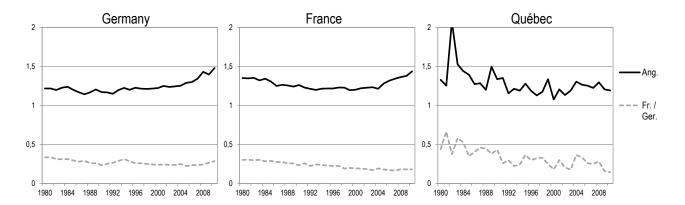

Impact follows suit (Figure 2): for each of the three nations, papers published in English gather, on average, three times as many citations as they national-language counterparts; this tendency has been rising quite steadily since the turn of the millennium for Germany and France. The same can be seen for Québec, even though the fewer number of papers explains the wider variations.
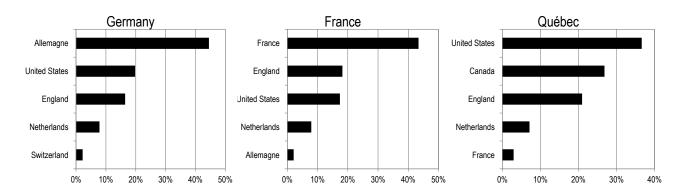
---

[2] WoS data for 2013 contains a high proportion of papers (roughly 50%) without publication language; these were excluded from the analysis.

Figure 2. Scientific impact of papers in the social sciences and humanities written in English, German (for German) and French (for France and Québec), 1980-2014

Interestingly, for Germany and France, publication venue choices are still predominately national, while American journals are the venues of choice for Québécois researchers (Figure 3). Also interesting is the fact that in terms of "large publisher nations" (Schubert and Michels, 2013), the positions of English and American journals are reversed for Germany and France, and that the Netherlands (home of Elsevier) comes in 4th place for all three nations. The fact that Québécois research is barely published in France also deserves to be noted.

Figure 3. Country of journals in which the German, French, and Québécois researchers publish in the social sciences and humanities, in percentages, 1980-2014

DISCUSSION AND CONCLUSION
The limitations of the study are inherent to the use of WoS data for the study of the social sciences and humanities (see Archambault et al., 2006; Larivière et al., 2006). These limitations notwithstanding, the clear tendency for German, French, and Québécois researchers to publish more and more in English is telling, as the data reveal that such a strategy pays off.

However, this raises questions fundamental to science: are there still contexts where opting for a language other than English can play in a researcher's favour? What symbolic capital can be associated with publication in a national language? And how will this capital be measured in a researcher's evaluation or in an institution's ranking?

Language is more than a vehicle for knowledge; it has, in the words of Bourdieu, "symbolic power" (1991). In countries where language and identity are intertwined, language strategies become more than a question of Impact Factor; they are a question of impact in the broader sense of the word, of collisions and repercussions far-reaching both ideologically and practically. With all of its obvious advantages, the near-complete anglicization of science is nigh; and until policy makers, funding agencies, institutions, peer evaluators, and indicators align to grant clear value to national languages, researchers will likely continue to migrate to publish, in order not to perish.

REFERENCES

Archambault, É., Vignola-Gagné, É., Côté, G., Larivière, V., & Gingras, Y. (2006). Benchmarking scientific output in the social sciences and humanities: The limits of existing databases. Scientometrics, 68(3), 329-342.

Bourdieu, P. (1991). Language & symbolic power. G. Raymond and M. Adamson, trans. Cambridge, MA: Harvard University Press.

Bourdieu, P. (2001). *Science de la science et réflexivité*. Paris: Éditions Raisons d'agir.

Buela-Casal, G., Perakakis, P., Taylor, M., & Checa, P. (2006). Measuring internationality: Reflections and perspectives on academic journals. *Scientometrics*, *67*(1), 45-65. doi: 10.1556/Scient.67.2006.1.4

Gingras, Y., & Mosbah-Natanson, S. (2010). Les sciences sociales françaises entre ancrage local et visibilité internationale. *European Journal of Sociology, 51*(2), 305-321.

Gnutzmann, C. & Rabe, F. (2014). 'Theoretical subtleties' or 'text modules'? German researchers' language demands and attitudes across disciplinary cultures. *Journal of English for Academic Purposes, 13*(2014), 31-40. doi: 10.1016/j.jeap.2013.10.003

Kirchik, O., Gingras, Y., & Larivière, V. (2012). Changes in publication languages and citation practices and their effect on the scientific impact of Russian science (1993–2010). *Journal of the American Society for Information Science and Technology*, *63*(7), 1411-1419. doi: 10.1002/asi.22642

Larivière, V., Archambault, É., Gingras, Y., & Vignola-Gagné, É. (2006). The place of serials in referencing practices: Comparing natural sciences and engineering with social sciences and humanities. *Journal of the American Society for Information Science and Technology, 57*(8), 997-1004.

Larivière, V. & Gingras, Y. (2010), The impact factor's Matthew Effect: A natural experiment in bibliometrics. *Journal of the American Society for Information Science and Technology*, *61*(2), 424-427. doi: 10.1002/asi.21232

Merton, R.K. (1968). The Matthew effect in science—The reward and communication systems of science are considered. *Science, 159*(3810), 56-63. Retrieved from http://www.jstor.org/stable/1723414

Schubert, T. & Michels, C. (2013). Placing articles in the large publisher nations: Is there a "free lunch" in terms of higher impact? *Journal of the American Society for Information Science and Technology*, *64*(3), 596-611. doi: 10.1002/asi.22759

Université de Montréal. (n. d.). Faits et chiffres. Retrieved from http://recteur.umontreal.ca/documents-institutionnels/faits-et-chiffres/