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Taking national language publications into account: the case of the Finnish performance-based research funding system

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Introduction

Finnish scholars have been part of the international research community since the 13th century. They frequented Paris and other European centres of learning, and the first Finnish university was established in 1640 in Turku. While Finnish was developing as literary language, the elite in Finland published in Latin, Swedish and other languages. The status of Finnish as language for learned communication has been debated ever since the first dissertations in Finnish were defended in the mid-19th century. Expansion and democratization of the higher education system paved the way for the increased use of national languages in dissemination of scholarship in the social sciences and humanities (SSH).

During the past decades, the tide in scholarly communication has again turned in favour of internationalization, especially the use of English as a new lingua franca. Statistics collected from 1994 to 2010 show that the share of Finnish universities’ SSH output published in Finland has decreased from two-thirds to less than half. Around three-fourths of this output is in Finnish language. Thus, the statistics also imply a considerable decrease in the share of national language publications (Auranen & Pölönen 2014) because SSH publications written in Finnish are – in the overwhelming majority – published in Finland only. More accurate publication metadata collected from universities since 2011 and stored in the VIRTAL publication information service shows that both the share and absolute number of peer-reviewed SSH publications in Finnish is slowly falling (Pölönen 2016). In a European context, the share of English language publications in SSH is growing and is in Finland relatively large (Kulczycki et al. 2018).

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1 This work is conducted within the framework of the COST action “European Network for Research Evaluation in the Social Sciences and Humanities” (ENRESSH, CA15137, enressh.eu).
Consequently, the SSH research community in Finland is increasingly concerned about the survival of Finnish language publishing. This concern is aligned with an understanding that science policy in Finland strongly encourages English language journal publishing (Sivula et al. 2015). In the early 2000, the debate concerned the role of a major research funding agency, the Academy of Finland, in the internationalization of SSH, as funding proposals were submitted in English and were evaluated by foreign experts (Väyrynen 2006). Later, incentives for increased use of English in the SSH have been attributed to the funding model used by the government for allocating block grant funding to the universities on the basis of educational and research outputs (Sivula et al. 2015).

Academic and scholarly publications were introduced to the performance-based research-funding system (PRFS) in 2007. The share of funding based on publications has constantly increased, being 0.3 per cent in 2007-2009, 1.7 per cent in 2010-2012, and 13 per cent since 2013. Before 2010, quality of publications was taken into account by omitting publications in the universities’ own series. From 2010 to 2014, the model emphasized the importance of “international refereed publications” compared to “other publications”. The latter category included both refereed and not refereed outputs published in Finland. Only as of 2013, monographs have been counted with a weight four times higher than articles. Thus, in 2007-2012 the PRFS incentivised publishing in international journals.

In 2015, Finland adopted the Norwegian model (Sivertsen 2016), in which the weight of peer-reviewed publications in the funding-model is determined on the basis of a quality index of publication channels (Publication Forum). The rating has three levels for peer-reviewed publication series and book publishers: 3 = top, 2 = leading and 1 = basic. There is also a level 0 for channels not qualifying as level 1. Level 0 contains mostly channels that do not have regular peer-review practice. But this category also includes peer-reviewed outlets that are considered local (mainly for the authors from one organisation) or of questionable quality.

When the level ratings were introduced to the funding model in 2015, publications in level 2 and 3 channels were equally rewarded (Tables 1 and 2). Since 2015, the Finnish funding-model also takes into account non peer-reviewed publications addressed to scholars, as well as to professional and general audiences (monographs 0.4 and articles 0.1). In 2017, the differences between level 0, 1 and 2 peer-reviewed publications have been increased in the funding formula in order to incentivise publishing in higher quality outlets. Level 3 publications also have larger weight than level 2 publications.

<table>
<thead>
<tr>
<th>Publication type</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
<th>Level 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-reviewed monograph</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Peer-reviewed article in journal</td>
<td>3</td>
<td>3</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>Peer-reviewed article in book</td>
<td>3</td>
<td>3</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>Peer-reviewed article in proceedings</td>
<td>3</td>
<td>3</td>
<td>1.5</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1. Weight of publications in the Finnish PRFS 2015-2016.

<table>
<thead>
<tr>
<th>Publication type</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
<th>Level 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-reviewed monograph</td>
<td>16</td>
<td>12</td>
<td>4</td>
<td>0.4</td>
</tr>
<tr>
<td>Peer-reviewed article in journal</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Peer-reviewed article in book</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Table 2. Weight of publications in the Finnish PRFS since 2017.
In the Norwegian model, the weight of outputs is not dependent on the publishing language or country. This means that Finnish and English language articles or books published in outlets rated at the same level are equally rewarding for the universities. The crucial question is the rating of Finnish or Swedish language outlets compared to outlets publishing in English and other languages. Indeed, the classification of national language channels has been much debated, especially as regards the levels 2 and 3, since the institution of the Publication Forum in 2010.

The original 2012 rating included three book publishers and only four journals/series publishing in Finnish or Swedish on level 2. Following a position statement issued by 60 learned societies, the number of Finnish and Swedish language channels on level 2 in the SSH fields was increased considerably. The main criteria were high quality of peer review, wide coverage of the specific research field, strong focus on Finnish society, history and culture, as well as comparability in terms of merit to international channels on the level 2. Despite some changes, the level 2 has included since 2012 three national language book publishers and over 20 journals and book series (Table 3). Economics and Business, Media and communication, as well as Social and economic geography have Finnish language journals but none were admitted to level 2 by the respective SSH panels.

<table>
<thead>
<tr>
<th>Field</th>
<th>2012</th>
<th>2012-2014</th>
<th>2015-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Business and management</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Law</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Sociology</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Social policy</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Psychology</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Educational sciences</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Political science</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Media and communications</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Social and economic geography</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other social sciences</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Philosophy</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Languages</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Literature studies</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Arts</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Theology</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>History and archaeology</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Other humanities</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>All</td>
<td>4</td>
<td>25</td>
<td>22</td>
</tr>
</tbody>
</table>

In the current debate and critique about the Finnish publication Forum ratings, it is frequently argued that in some SSH fields Finnish language publications are not at all taken into account in the funding-model, or that the Finnish publication channels are undervalued in the Finnish rating. It has been a cause for concern that level 3 includes only international outlets, especially after 2017 when the differentiation between level 2 and 3 publications was introduced to
funding model. It is also argued that the undervaluation of national language publishing in the funding model results in the decreasing share and number of Finnish language publications (Sivula et al. 2015; Heikkinen 2018). In this paper we investigate these questions in light of the publication data used as basis of the Finnish PRFS:

- How balanced is the representation of peer-reviewed publications in different languages in levels 2 and 3 for the SSH and specific fields?
- How balanced is the distribution of peer-reviewed SSH output in different languages to different levels in case of journal articles and book publications?
- How has the number of peer-reviewed SSH journal articles and book publications in Finnish and English developed in different levels from 2011 to 2016?

Data and results

The data consists of 47,423 publications published in 2011-2016 that 14 Finnish universities have reported to the Ministry of Education and Culture and that are stored in the VIRTA publication information service. The number of yearly publications has been relatively stable (2011: 7595; 2012: 7949; 2013: 8233; 2014: 8079; 2015: 7968; 2016: 7599). For the year 2016 the data collection is not entirely complete. For each publication, the reporting university has indicated the publication type and field of science. This study includes articles in journals, books and proceedings, as well as monographs, which universities have reported as being peer-reviewed, and for which they have indicated a field of social sciences or humanities as primary subject category. The data contain duplicates when publications have been co-authored by researchers from more than one Finnish university. Language is not mandatory information but universities have reported language for almost all peer-reviewed publications. Language of publications, for which the information was missing, has been manually checked on the basis of the title of the publications.

Of all peer-reviewed SSH publications produced by Finnish universities in 2011-2016, 69 % are published in English, 24 % in Finnish, 2 % in Swedish and 4 % in other languages. Of all level 2 and 3 publications, 76 % are in English, 22 % in Finnish, 1 % in Swedish and 1 % in other languages. We discuss levels 2 and 3 together, because they were not differentiated in the funding-model until 2017. The share of Finnish language output that is counted in the PRFS as level 2 and 3 publications roughly corresponds to the share of Finnish language output in SSH (Figure 1). In the funding model, English language publications indeed have some advantage, as the share of English language output on level 2 and 3 is larger than the share of English of all peer-reviewed publications. Swedish and other language publications contribute to the levels 2 and 3 less than their share of the entire SSH output.

The distribution of peer-reviewed outputs to different levels per publication type shows that the relative advantage of English language publications in the funding model is due to book publications (Figure 2). Practically the same share of peer-reviewed SSH journal articles published in English, Finnish and Swedish count in the PRFS as level 0, level 1 and level 2 publications. The share of level 2 in English is smaller because 10 % of the journal articles count as level 3 publications. If we count level 2 and 3 together, the share is the same for English, Finnish and Swedish articles. In journal articles, other publication languages are under-represented on level 2 and 3.

In the case of book publications, including articles/chapters in books and monographs, English language publications have a more advantageous distribution to level categories than Finnish publications, and especially Swedish and other language publications. The Finnish PRFS counts
24 % of SSH book publications in Finnish on level 2. That share however is a bit smaller than in the case of Finnish language journal articles (34 %). The share of English language book publications on level 3 is the same as journal articles, but especially the share of level 2 book publications in English is much larger (45 %) than the share of level 2 journal articles (24 %). Book publications in Swedish and other languages have a disadvantage.

Figure 1: Share of Finnish language publications of all peer-reviewed output, and specifically of level 2 and 3 output, in social sciences and humanities 2011-2016.

Figure 2: Share of SSH journal articles and book publications in English, Finnish, Swedish and other languages in different levels 2011-2016.
The number of publications in Finnish is in decline; however this is mainly due to book publications (Figure 3). The amount of journal articles remains relatively stable in all levels, and has actually increased in level 1. More fluctuation in the number of book articles and chapters is to be expected, as shown for example by the case of *Studia Biographica* that publishes in some years more than hundred short biographic articles in Finnish, and in some years no articles at all. Nevertheless, the decline in Finnish language book publications is attested in all levels, which is difficult to explain in terms of PRFS incentives. It seems that to some extent SSH publishing has shifted from Finnish language books to Finnish language journals.

Figure 3: Number of peer-reviewed Finnish language SSH outputs in different levels 2011-2016.

![Graph showing journal articles and book publications](image)

* Level 1 without Studia Biographica.

Figure 4: Number of peer-reviewed English language SSH outputs in different levels 2011-2016.

![Graph showing journal articles and book publications](image)
In the case of English language journal articles we see no increase on level 0, small increases in level 2 and 3, and the largest increase in level 1 output (Figure 4). The change from 2014 to 2015 is a result of the updated rating, in which especially foreign journals were downgraded, thus increasing the number of English language articles on level 1. The number of English language book publications is relatively stable in Level 1 and 0 but increases in level 2 and 3. Given that larger share of book publications than journal articles are published in level 2 and 3 outlets, the Finnish PRFS is indeed favourable to international book publishing in the SSH.

**Discussion and conclusions**

The Finnish case demonstrates, first of all, that it is possible to develop a publication indicator that takes national language publications adequately into account. This requires the creation of a national level database of publications that includes all types of outputs and all publication languages. Other components of the Norwegian model are the quality index of publication channels and a funding formula with weights assigned to publications according to publication type and level of the channel. In the Finnish funding formula the peer-reviewed articles in journals, books and proceedings in the same quality level have the same weight, and monographs have four times higher weight compared to articles, regardless of publication language.

Compared to other Nordic countries that have adapted the Norwegian model, the Finnish quality index of publication channels has relatively large number of national language channels on level 2 (currently 3 book publishers and 22 journals/series). A more detailed comparison of the position of national language publishing across countries that have implemented the Norwegian model is beyond the scope of this paper. SSH publications concentrate heavily in national language channels, whereas foreign language publications are distributed over a large number of outlets. The share of Finnish language SSH outputs on level 2 corresponds roughly to the share of Finnish language publications in general. The rating of national language outlets results in a balanced representation of Finnish, Swedish and English language journal articles in different levels. The rating is, however, more favourable to English than Finnish and Swedish language book publications. The share of publications in languages other than English, Finnish and Swedish is small, but this group of publications is under-represented on levels 2 and 3 in the quality index of journals and book publishers. Since 2017, level 3 is differentiated from level 2 in the funding model so this indeed creates an incentive also in the SSH to publish in the top international outlets. It remains to be seen how this may affect publishing in Finnish.

From a science policy perspective, it is interesting to note that the relatively large share of Finnish language outlets on Level 2 has not deterred internationalization of SSH publishing. Despite recognizing output in Finnish on level 2, the share and number of English language publications has increased. SSH publishing in Finland is in European comparison internationally oriented (Kulczycki et al, 2018), so it is an open question to what extent incentives are needed for further internationalization for example in Law. Besides the PRFS, internationalizing incentives may come from other evaluation contexts, such as increased international competition for positions and project funding. It may be that the PRFS actually values Finnish language publications higher than other evaluations. Some SSH researchers also feel that publications in Finnish are overvalued (Hukkinen 2018). Of course, transformations of publication patterns depend not only on the evaluation contexts but also on other factors like the rise of open access, the growth of the number of scholars, international developments in each field, etc. At any rate, it is difficult to explain the development of publishing patterns in Finland in terms only of the PRFS, because the number of Finnish book publications is
declining also on level 2, and not only on levels 1 and 0. In the case of journal publishing, the number of both Finnish and English language articles has increased considerably in level 1 channels. Rather than publishing English language journal articles, the Finnish PRFS is favourable to English language book publishing.

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