



Is my publication peer reviewed?

**A comparison of top-down and bottom-up identification of peer review
in the framework of the Finnish and Flemish performance-based
research funding systems**

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PEERE International Conference on Peer Review

7-9 March 2018, CNR Rome



PRESENTATION

1. **BACKGROUND & AIMS**
2. DATA & RESULTS
3. FINDINGS & DISCUSSION



INCREASING IMPORTANCE OF PEER-REVIEW

- In performance-based research funding systems (PRFSs) evidence of pre-publication peer-review by experts in the field is typically considered a minimum requirement of included publications.
- Originating from the sciences, pre-publication peer review has become a widely accepted standard in publishing of new results, also in the social sciences and humanities (SSH).
- The notion of peer review remains challenging because of the variety of practices – from the editorial to the double-blind – across SSH fields, and because of the differences in journal and book publishing.
- Consequently, it is not always crystal clear whether a publication channel applies peer review, or whether a specific article, chapter or book has gone through pre-publication peer review.



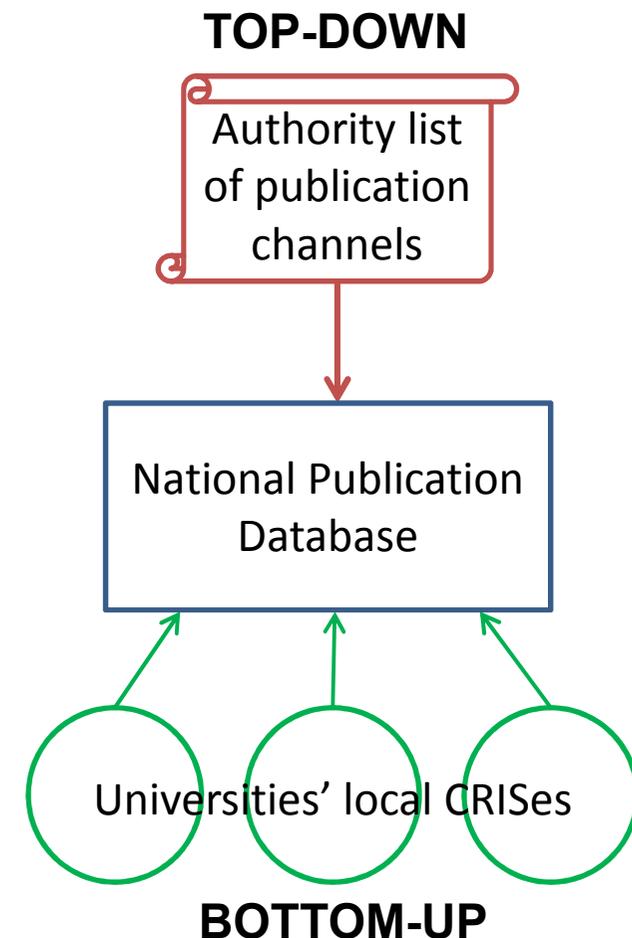
Social Sciences vs. Humanities

- We expect ambiguity about peer review status to occur more in humanities disciplines than in social sciences, and more in books than journals.
- It is more common for humanities researchers to communicate by means of the same publication channels within and beyond academia.
 - Verleysen, F. T. & Engels, T. C. E. (2014). Internationalization of peer reviewed and non-peer reviewed book publications in the Social Sciences and Humanities. *Scientometrics* 101: 1431–1444.
- Journals in humanities are characterized by less frequent use of double-blind review and larger share of non-original research output.
 - Mañana-Rodríguez, J. & Giménez-Toledo, E. (2013). Scholarly publishing in social sciences and humanities, associated probabilities of belonging and its spectrum: a quantitative approach for the Spanish case. *Scientometrics* 94: 893-910.
- Differences in peer-review practices in journals and book publications
 - Verleysen, F. T. & Engels, T. C. E. (2013). A Label for Peer-Reviewed Books. *Journal of the American Society for Information Science and Technology* 64: 428-430.



PEER-REVIEW IN PRFS FRAMEWORK

- In Flanders and Finland, field-specific panels of experts are responsible for producing an authority list of peer-reviewed publication channels, to which we refer in this paper as top-down identification of peer review.
- PRFS takes into account only peer-reviewed publications in the approved outlets
- In the Finnish system, researchers indicate at the time of registration of a publication in the local current research information system (CRIS) whether they consider their publications to have been peer-reviewed prior to publication or not, which we refer to as bottom-up identification of peer review.





GREY ZONES OF PEER-REVIEW

- In this contribution we analyse the occurrence of lack of clarity concerning peer review status in SSH:
 1. Comparison of classifications of journals/series as peer-reviewed or not-peer-reviewed by expert-panels in Finland and Flanders.
 2. Comparison of top-down identification of peer-review on basis of the authority list of peer-reviewed publication channels versus bottom-up reporting of peer-review by authors versus (Finland only)
 3. Occurrence of co-publications one university has reported as peer-reviewed and another university as not-peer-reviewed (Finland only)
- In each case, we use the term “the grey zone of peer-review” to refer to publication activity, the peer-review status of which is unclear.



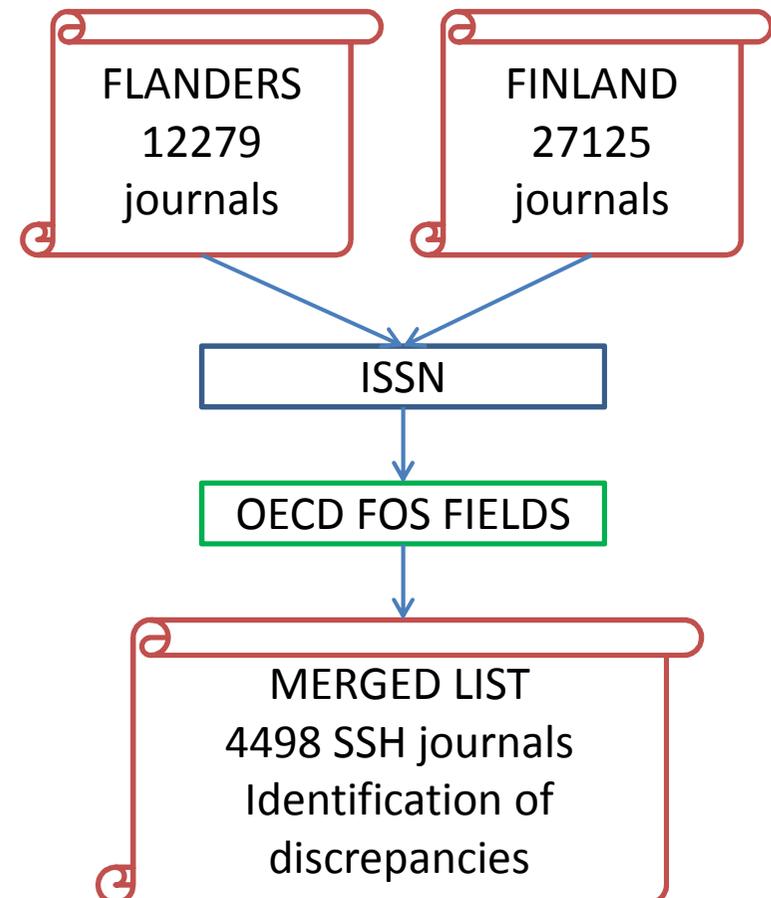
PRESENTATION

1. BACKGROUND & AIMS
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1. COMPARISON OF AUTHORITY LISTS

- Data consists of 2016 versions of journal/series lists from Flanders and Finland merged on basis of ISSN
- OECD FOS fields were assigned on the basis of available field classifications from CRISTIN (Norway), ERIHPlus, Web of Science, Scopus and manually.
- Analysis includes 4495 journals assigned to any one of the SSH fields.
- Journals evaluated differently in Flanders and Finland as peer-reviewed or not-peer-reviewed were identified





GREY ZONE IN JOURNAL LISTS

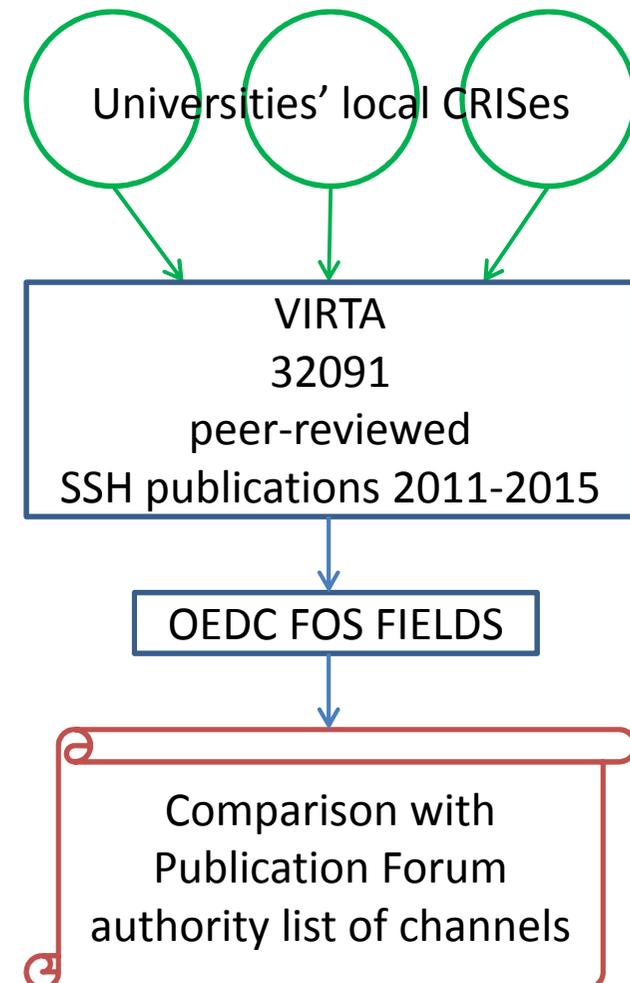
- 9 % of the journals (427) have been evaluated differently by the Flemish and Finnish panels as peer-reviewed or not.
- Grey Zone is larger in humanities (13 %) than Social Sciences (8 %).
- **Note!** Approval may depend also on criteria other than peer-review, such as quality, localness and relevance, or inclusion in WoS.
- Evidence of peer-review may not be available

Field	# of Journals	Total Grey Zone
All Fields	4498	9 %
Social sciences	2784	8 %
5.1 Psychology	465	4 %
5.2 Economics and business	687	6 %
5.3 Educational sciences	275	7 %
5.4 Sociology	342	6 %
5.5 Law	278	13 %
5.6 Political science	220	13 %
5.7 Social and economic geography	197	4 %
5.8 Media and communications	221	9 %
5.9 Other social sciences	99	16 %
Humanities	1714	13 %
6.1 History and archaeology	323	14 %
6.2 Languages and literature	748	13 %
6.3 Philosophy, ethics and religion	403	6 %
6.4 Arts	180	19 %
6.5 Other humanities	60	17 %



2. TOP-DOWN VS. BOTTOM-UP

- Data consists of 31820 SSH journal articles and book publications (excluding edited works and conference articles) published in 2011-2015 and reported by 14 universities to VIRTAs as peer-reviewed publications.
- OECD FOS fields were assigned on the basis of 1st field assigned to each publication at the time of reporting to local CRISes.
- Publications in journals and book publishers not approved to be peer-reviewed academic/scholarly channels by the Finnish expert panels (Publication Forum) were identified.





TOP-DOWN VS BOTTOM-UP GREY ZONE

- 16 % of the peer-reviewed publications (5108) according to local definition are not published in channels approved by the expert panels
- Grey Zone is slightly larger in humanities (17 %) than in social sciences (15 %).
- **Note!** Bottom-up definition must conform to data-collection peer-review criteria, may involve data-collection personnel

Field	# of Publications	Total Grey Zone
All journals/series	32091	16 %
Social sciences	20308	15 %
5.1 Psychology	1785	7 %
5.2 Economics and business	4756	13 %
5.3 Educational sciences	3735	20 %
5.4 Sociology	2914	16 %
5.5 Law	2204	18 %
5.6 Political science	1623	18 %
5.7 Social and economic geography	625	14 %
5.8 Media and communications	1077	12 %
5.9 Other social sciences	1591	17 %
Humanities	11783	17 %
6.1 History and archaeology	3037	16 %
6.2 Languages and literature	3834	15 %
6.3 Philosophy, ethics and religion	2630	13 %
6.4 Arts	1261	27 %
6.5 Other humanities	1021	20 %



PUBLICATION TYPE AND LANGUAGE

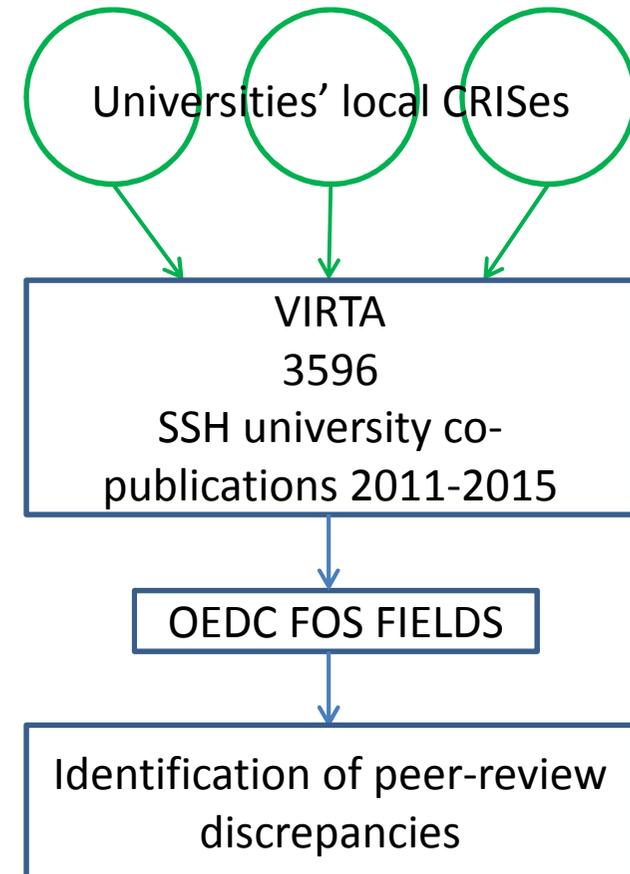
- Top-down vs. Bottom-up
Grey zone is larger among book publications (25 %) than journal articles (9 %).
- Top-down vs. Bottom-up
Grey zone is larger among Finnish language (22 %) than other language publications (13 %).





3. COMPARISON OF LOCAL DEFINITIONS

- Data consists of 3596 SSH co-publications of two or more Finnish universities, both peer-reviewed and not peer-reviewed, published in 2011-2015 and reported to VIRTAs in 2016.
- Additional data consists of publication types originally assigned to university co-publications in local CRISes (discrepancies have been adjusted in VIRTAs data).
- OECD FOS fields were assigned on the basis of locally assigned fields.
- Publications originally determined differently as peer-reviewed or not peer-reviewed were identified.





GREY ZONE OF LOCAL DEFINITION

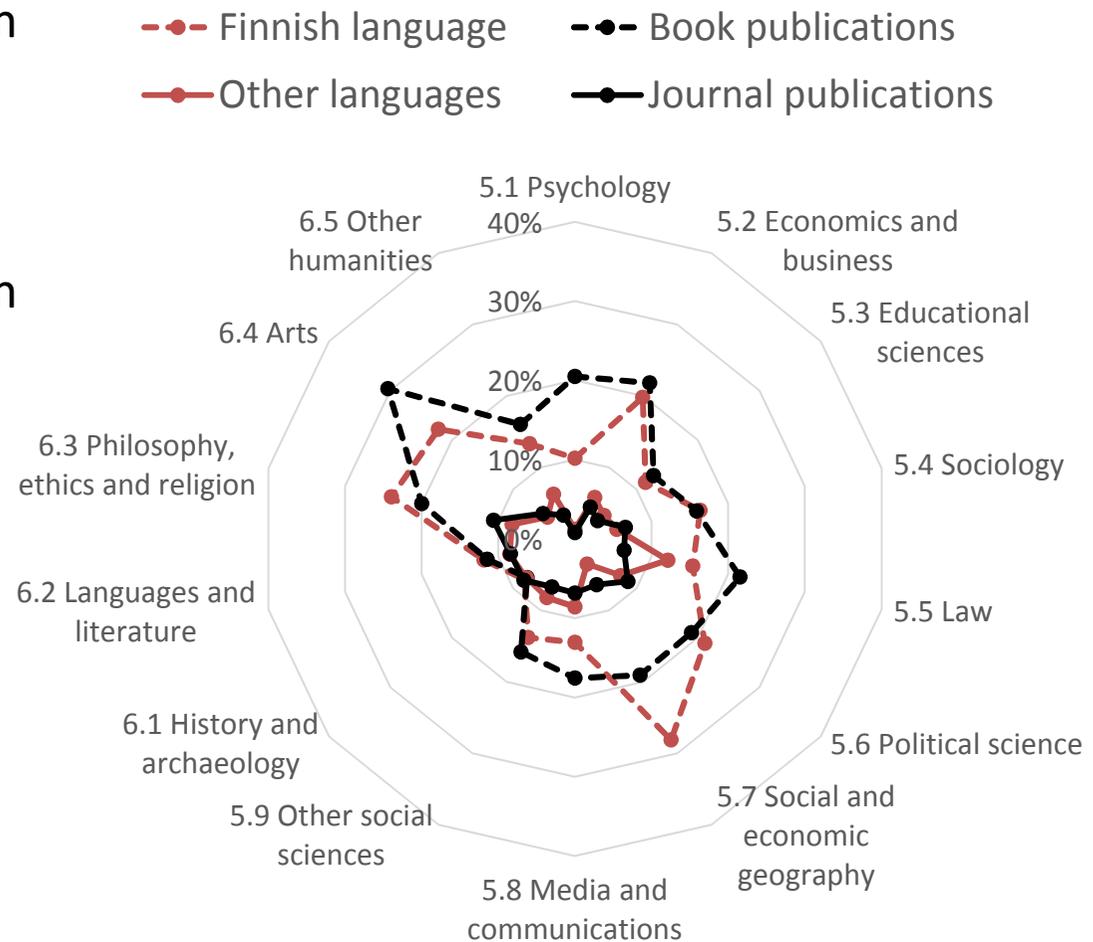
- 8 % of the co-publications (303) have been reported differently as peer-reviewed or not peer-reviewed by different universities.
- Grey Zone is larger in the Humanities (11 %) than in the Social Sciences (8 %).
- **Note!** Bottom-up definition must conform to data-collection peer-review criteria, may involve data-collection personnel

Field	# of Publications	Total Grey Zone
All Fields	3596	8 %
Social sciences	3436	8 %
5.1 Psychology	544	2 %
5.2 Economics and business	858	8 %
5.3 Educational sciences	676	8 %
5.4 Sociology	428	10 %
5.5 Law	157	14 %
5.6 Political science	211	13 %
5.7 Social and economic geography	89	12 %
5.8 Media and communications	174	10 %
5.9 Other social sciences	299	10 %
Humanities	949	11 %
6.1 History and archaeology	149	8 %
6.2 Languages and literature	335	10 %
6.3 Philosophy, ethics and religion	132	17 %
6.4 Arts	162	12 %
6.5 Other humanities	171	9 %



PUBLICATION TYPE AND LANGUAGE

- Local peer-review definition
Grey zone is larger among book publications (16 %) than journal articles (5 %).
- Local peer-review definition
Grey zone is larger among Finnish language (16 %) than other language publications (4 %).





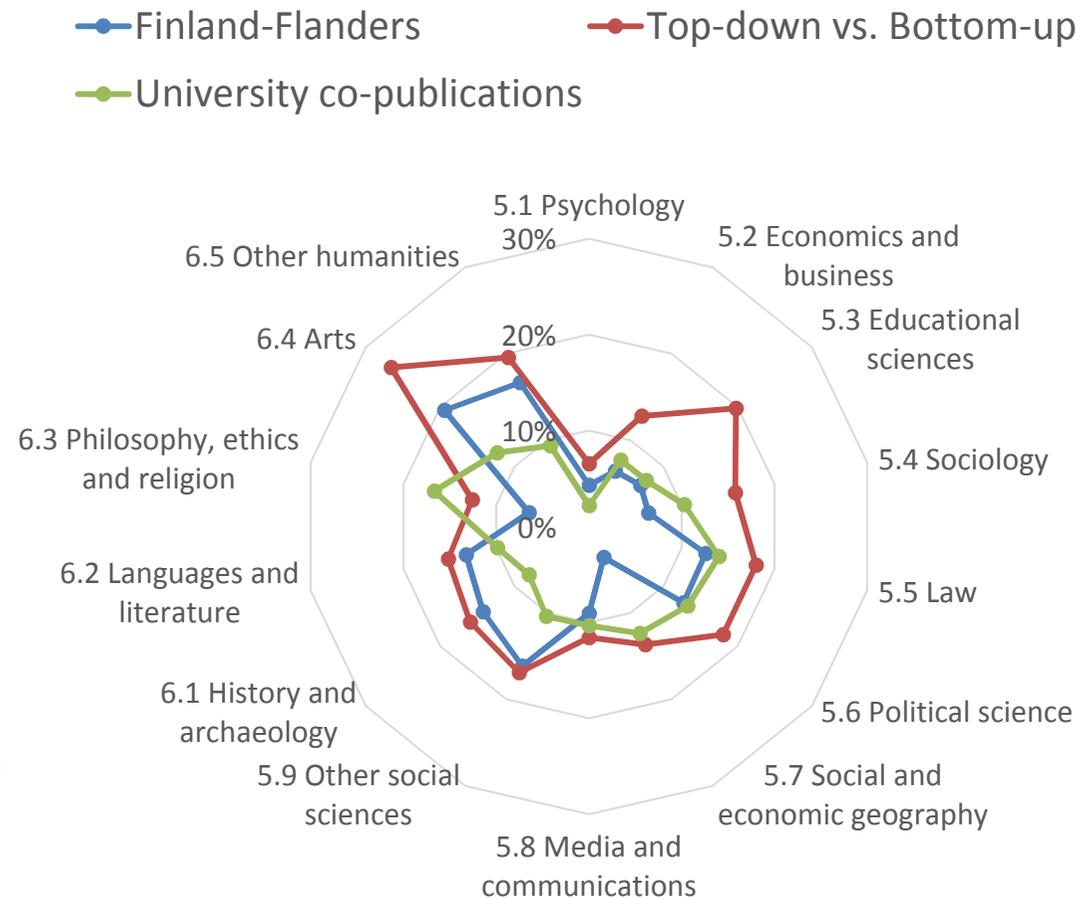
PRESENTATION

1. BACKGROUND & AIMS
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FINDINGS

- Peer-review grey-zone of journals and publications is, as expected, larger in humanities than the social sciences.
- Psychology and Economics typically show small grey zone, while Arts, Other humanities, and Law are often located at the other end of the spectrum.
- Ambiguity is largest among Finnish language and book publications.





DISCUSSION

- Causes of discrepancy between the Flemish and Finnish journal list?
 - Evaluation involves also other criteria than peer-review: quality, localness and relevance, or inclusion in WoS.
 - Availability of evidence of peer-review at the time of evaluation.
- Discrepancy seems to occur especially in case of journals not publishing in English or national language (Dutch or Finnish): e.g. German, French, Italian.
 - Experts may be well placed to take into account field-specific differences in peer-review channels, but they may find this more difficult across linguistic and cultural boundaries.



DISCUSSION

- Causes of discrepancy between authors and authority list, and between co-authors?
 - Formally refereed channels disapproved because local or questionable
 - Also non-refereed outputs are published in refereed outlets.
 - Human error in application of peer-review definition.
 - Gaming the system by assigning publications to advantageous category.
- Discrepancies occur especially in Finnish language book publications
 - Same publisher or publication may address academic, professional and general audiences.
 - Variety of informal and formal feedback, editing and peer-review processes involved in book publishing.
 - Difficulty in recognizing peer-review practices outside one's own epistemic culture.



CONCLUSIONS

- Identification of peer-reviewed publications is one of the key design issues in the development of performance-based research funding systems including publication data outside international citation databases (Web of Science and Scopus).
 - Even if data-collection involves strict definition of peer-reviewed publications, there will probably be a good deal variation in the application of standards to journal articles and especially books publications.
 - One option for controlling peer-review status of publications is to develop a national authority list of peer-reviewed journals and book publishers ← expert-evaluation of channels publishing in other than English or the national language may need special attention.
 - Flanders and Finland have also introduced labels for peer-reviewed publications to promote uniform and transparent peer-review standards among the national publishers.



CONCLUSIONS

- We have studied ambiguity concerning peer-review status of journals and publications in context of PRFS in Finland and Flanders
 - Similar problems concerning identification of peer-reviewed publications may arise also in other metrics-based and expert-based evaluation contexts (project and unit evaluation, recruitment, tenure, personal performance, bonus systems).
 - Distinction of peer-reviewed and not-peer-reviewed publications is also widespread in researcher's CV's → exaggerating achievements is a potential research integrity concern.



THANK YOU!