## **RESSI** 2024

# Research Evaluation in Social Sciences and Humanities book of Abstracts





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# DAY 1 SESSION 1.1 / Evaluation

### Playing the Evaluation Game or Gaming the Assessment Regime: How Does SSH Respond to Metrics?

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In my presentation, I will use the concept of 'evaluation game' developed in my recent book ('The Evaluation Game: How Scholarly Metrics Shape Scholarly Communication', CUP 2023) to show how this concept can enrich our understanding how researchers, institutions and other stakeholder respond to pressures generated by metrics and research evaluation exercises.

The evaluation of researchers and universities elicits a diverse array of responses to assessment expectations. Some metric-based systems successfully motivate researchers to adapt their publication strategies and target higher-quality, more reputable outlets.

In contrast, other researchers strive to adhere to evaluation rules and satisfy metricsbased expectations with minimal personal cost, often resulting in numerous, occasionally low-quality publications in less reputable venues. However, a substantial portion of such practices should not be labeled as "gaming" but rather as "playing the evaluation game."

The term "gaming" fails to accurately capture the manner in which researchers alter their scholarly communication practices in response to publication pressures and evaluative metrics. Researchers publish more low-quality pieces instead of aiming to publish one outstanding paper because what really matters to keep their position (from the perspective of the evaluation regime that they are subject to) is the quantity of papers. In other words, researchers who engage in the evaluation game are not driven by a desire to maximize profits, but rather by a desire to maintain their current standing, which serves as their primary motivation.

Gaming is a strategy to maximize profits (including financial) which is fully in line with the rules, but it is often combined with finding loopholes in the legal system (e.g., through unforeseen but permitted interpretations of the rules). Thus, gaming, although perfectly legal, can be seen as unethical in that it violates scientific ethos (=disciplinary loyalty).

The evaluation game like gaming is fully compliant with legal principles but is not as easy to evaluate in moral terms as is gaming. The goal of players of the evaluation game is most often to maintain the status quo (e.g., keep their jobs, meet evaluation requirements) by following the rules at the 'lowest possible cost', not to maximize profits. Following the rules at the 'lowest possible cost' is crucial in the distinction between 'playing the evaluation game' and 'gaming'.

Assessment of the ethical aspects of playing the evaluation game, however, must take into account additional structural dimensions, that is, how the institution—whose rules are met through playing the game—provides resources for the work needed to meet its requirements.

I wrote The Evaluation Game to offer a fresh take on the origins and effects of metrics in academia, as well as to suggest ways to improve research evaluation. In my presentation, I will argue that simply designing better and more comprehensive metrics for research evaluation purposes won't be enough to halt questionable research practices like the establishment of predatory journals, guest authorship, or superficial internationalization, often seen as "gaming" the research evaluation systems. It is not the metrics themselves, but the underlying focus on economics that is driving the transformation of scholarly communication and academia itself.

I aim to demonstrate that a deeper understanding of the reasons behind the transformation of research practices can guide toward better solutions for governing academia and defining the values that should shape its management. This is a crucial task today, as pressures on academia continue to mount and more countries are either implementing or considering the introduction of national evaluation regimes.

Understanding Evaluation Criteria: A Comprehensive Analysis of the Implementation of Tenure-Track Professorships at German Universities

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#### INTRODUCTION

Germany has long employed a system where postdocs could only be hired as full professors at a very late stage in their careers, typically after having earned a second degree post PhD, the "habilitation". Since 2002, the implementation of the junior professorship has notably led to a significant decrease in the age at initial appointment, however, this did not ensure early-career researchers a permanent position within academia. Now, the tenure-track professorship position is supposed to address this issue. The legal framework for a tenure-track and thus the guarantee for a permanent position at the same university after a positive evaluation was already established through the junior professorship, but so far universities made limited use of this possibility. Additionally, 2016, the new tenure-track professorship model was enticed for universities through a federal-state program comprising 1,000 positions. The initially fixed-term tenure-track professorship opens the possibility of permanent employment after success in usually two predetermined evaluation procedures.

Prior to this, such a career trajectory was not viable within German universities, thereby altering the landscape of professional careers in academia (see Kauffeld et al. 2018, p. 293; Bloch et al. 2021). The model introduced a new break-it-or-make-it moment, typically earlier in the career. It also shifted the decision-making from the hiring commission as the only appointing institution within the universities, expanding it to other instances, such as faculties or tenure boards. The criteria and application also changed from a competitive system of candidates applying for a job to a goal-

oriented system, where a hired scientist needs to achieve these goals to keep the job and receive tenure.

Eight years after the introduction of this program, there continue to be discussions about decision-making processes and legal structures at German universities, especially in the context of tenure-track (Nickel 2016). In the discussion among practitioners, it is emphasized that the new career path and the associated definition of evaluation criteria must be fair in order to be a success (Borgwardt 2021). However, there is hardly any research on the new career path on which to base these discussions (Thaller et al. 2022; Franke-Nanic et al. 2022). Therefore, we want to take a closer look at the extent to which the evaluation processes in tenure-track professorships contribute to the perception of fairness.

### THEORETICAL FRAMEWORK

The theoretical foundation of the research project is interdisciplinary, combining political and psychological approaches. Through the examination of political research, the focus is particularly on the implementation and execution of evaluation criteria at German universities – thus, standards that enable a perception of fairness. Starting from a top-down process, the structures for the introduction of a tenure-track professorship were addressed on three levels: (1) the federal government and the states, which, in their agreement to promote 1,000 Tenure-Track professorships, call on universities to develop a long-term personnel concept; (2) the state university laws of each federal state, which regulate the legal framework for Tenure-Track professorships; (3) and the universities themselves, which have the freedom to define and negotiate evaluation criteria. The theory provides a framework to understand how political decisions influence reality and their effects on the actors on the ground, here, the professoriate with tenure-track.

The perception of fairness has been researched in psychology and is divided into different types: While distributive fairness refers to the fairness of the result and the conditions for the distribution of goods along the way, the concept of procedural fairness focuses on the fairness of decision-making and the opportunity to contribute to the process (Bierhoff, 2022). Furthermore, informational fairness refers to the transparency of the handling of information (ibid.). This concept provides a theoretical foundation to analyze the perception of fairness.

The interplay of political implementation and a psychological perspective on fairness mediated by disciplinary differences allows for a comprehensive link between microand meso-level, capturing both structural conditions and their impact on the perception of individuals.

### DATA, MEASUREMENT AND METHODS

This article employs a mixed-methods design to (1) elucidate the formal norms existing due to the tenure-track professorship model and (2) analyze the influence of

these norms on the perception of fairness by tenure-track professors. The empirical data primarily originates from two sources: A systematic qualitative document analysis of the tenure-track statutes of the 16 higher education laws in Germany and 35 regulations of German universities that have introduced the tenure-track model, as well as results from a panel study by the DZHW on professors' careers (*prof\*panel*).

For the document analysis, the first step was to examine whether and what information the sixteen state higher education laws provide regarding the evaluation criteria in a tenure-track model. Regarding the university's statutes, it was investigated whether they are (1) transparent, (2) comparable or divergent, and (3) what patterns can be identified.

Complementing this rather objective qualitative assessment, we analyzed the perceived fairness from N = 424 survey respondents who were on a tenure-track at the time of assessment (06–09/2022). The concept of fairness was captured by distributive and procedural fairness: With regard to distributive fairness, tenure-track professors were asked about the perceived fit of the criteria to their profile and whether the criteria were easy to implement at the given time. Procedural fairness was measured by asking about the tenure-track professors' perceived ability to influence the design of the evaluation criteria. Informational fairness was measured by asking about the perceived of the evaluation criteria.

### PRELIMINARY RESULTS

None of the 16 state higher education laws explicitly address the evaluation criteria in the tenure-track process. However, all state higher education laws contain provisions for quality assurance in appointment procedures for professorships and refer to them. Only two states go beyond the provisions of general appointment procedures in their norms for quality assurance. Notably, no federal state explicitly names specific content for criteria. The analysis of a sample of 35 universities revealed regarding (1) transparency that all 35 universities establish general quality aspects and standards that can be specified and weighted by the responsible actors depending on the profile of the professorship. In terms of (2) comparability or strong divergence, clear differences were already noticeable. The results provide an initial insight into the patterns that can be identified (3). The regulations show differences in the degree of formalization (detail level) of the provisions. A high degree of formalization exists when a university has formulated and operationalized its criteria concretely and in detail for each task complex. The document analysis shows that most university regulations have a relatively low degree of formalization and mainly contain catalogs of criteria (template formats) with generally formulated requirements in the areas of research, teaching, and academic self-administration.

The preliminary analysis of the survey data regarding the perceived fairness of the tenure-track evaluation criteria provided the following results: Regarding distributive fairness, 40% of the respondents agreed that they perceived that the criteria fit their

profile, while 36% disagreed. Nevertheless, the majority of 60% found the criteria easy to implement, while only 14% thought this was not the case. With regard to procedural fairness, only 34% reported the ability to influence the evaluation criteria's design, whereas 55% responded that this was not the case. However, the perceived transparency of the evaluation criteria per se was considered transparent by the majority of 61%, while 24% of the tenure-track professors perceived them as non-transparent. Overall, while the perceived influence on the criteria's design and fit to research profile was not considered very high by the majority, most respondents still perceived them as transparent and easy to implement.

### REFERENCES

Bierhoff, H. (2022). Fairness. In M. A. Wirtz (Hrsg.): Dorsch Lexikon der Psychologie.

Bloch, R.; Krüger, A. K.; Hartl, J.; Würmann, C. (2021): Arbeits- und Beschäftigungsbedingungen an Hochschulen in Deutschland. Politische Steuerungsversuche und ihre Effekte seit 2006. Bielefeld.

Borgwardt, A. (2021): Die Tenure-Track-Professur: Impulsgeberin für das deutsche Wissenschaftssystem. Unter Mitarbeit von Thüringer Universitäts- und Landesbibliothek Jena, Uwe Cantner, Rolf van Dick, Joachim Escher, Georg Krausch und Hans-Jochen Schiewer.

Franke-Nanic, A.; Fröde, A.; Frosch, U.; Hundehege, M.; Küchel, J.; Mundt, F. et al. (2022): Implementierung einer Handreichung für standardisierte Statusgespräche im Rahmen von Tenure-Track-Verfahren. In: *P-OE* (3+4), S. 92–95.

Kauffeld, S.; Spurk, D.; Barthauer, L. und Kauche, P. (2018): Auf dem Weg zur Professur? Laufbahnen im wissenschaftlichen Kontext. In: Simone Kauffeld und Daniel Spurk (Hg.): Handbuch Karriere und Laufbahnmanagement. 1. Aufl. 2019. Berlin, Heidelberg: Springer Berlin Heidelberg (Springer Reference Psychologie), S. 291–325.

Nickel, S. (2016): Tenure Track-Professur. Kontroverse um neue Stellenkategorie. In: *Wissenschaftsmanagement* (1), S. 54–55. Online verfügbar unter <u>https://www.che.de/download/tenure\_track\_professur\_wima\_heft1\_2016-pdf/.</u>

Preissler, U. (2023): Wissenschaftliche Karriere besser planen. Tenure-Track-Professuren in Deutschland. In: *Forschung & Lehre* (7), S. 510–512.

Thaller, N.; Liermann, A.; Wüllner, C.; Benzinger, J; Schwanemann, S. (2022): Internationale Attraktivität der deutschen Tenure Track-Professur Geeignetes Rekrutierungstool für internationale Bewerber\*innen? In: *P-OE* (3+4), S. 86–91. Navigating Evaluation Frameworks in Humanities and Social Sciences: A Comparative International Analysis

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### INTRODUCTION

This paper presents findings from the project 'Research on Research: the role and mission of research in higher education', which is part of the ESRC-funded Centre for Global Higher Education (CGHE). In this paper, we focus on one strand of the research project. It discusses and compares how humanities and social sciences (HSS) researchers navigate through the formal research evaluation frameworks in England, Norway, Italy, Hong Kong SAR, Australia and New Zealand.

### RESEARCH CONTEXT

Research assessment exercises and performance-based funding schemes are powerfully shaping the understandings and practices of research, researchers, research cultures, and research governance, by stakeholders like governments, publishers, funders, universities, academics, and administrators around the world (Hicks et al. 2012; Jonkers & Zacharewicz, 2016; Oancea, 2019).

However, previous research revealed that the evaluation frameworks do not always match with the scope, value, purpose, nature, epistemologies, methodologies, and impact of HSS research (Reale, et al., 2018; Sivertsen, 2016). HSS researchers' careers, lived experiences, and positions within the research ecosystems thus have been

influenced and shaped by the evaluation frameworks. This paper examines this issue from a comparative perspective of different types of research assessment frameworks in six research systems around the world.

### METHODOLOGY

This paper reports findings based on the analysis of 69 interviews with stakeholders from different sectors in the research ecosystems, and 98 interviews from 12 case studies, which include two higher education institutions in each of the six studied systems (England, Norway, Italy, Hong Kong SAR, Australia and New Zealand). The interviews were conducted between 2021 and 2023. The stakeholders interviewed include leadership from ministries and other government agencies, research assessment agencies, data and publishing industry, research funders, unions, academies, etc., with diverse disciplinary training backgrounds. Case study participants were selected due to their diverse research experience across a range of academic disciplines (Humanities, Social Sciences, STEM, and Medical Sciences) and held a range of positions in the selected higher education institutions: early career, mid-career and established researchers, head of departments and research groups, academics with senior leadership positions and senior administrators in charge of the research strategy.

This paper mainly draws on interviews with participants from the HSS backgrounds, but also includes discussions about HSS research with other participants. Semistructured interviews were conducted online, each lasting on average over an hour in duration; and some were complemented by follow-up interviews to explore additional topics. Interviews were transcribed in full, and the transcripts were analysed thematically in NVivo and via hand notes. The analysis then followed a combination of both deductive and inductive coding and an iterative process. We developed the coding framework based on the review of the literature, prior research, and preliminary analysis. The coding framework was complemented with open coding, to add categories and themes emerging from the analysis. Inter-coder checks were conducted within the research team. This study has ethical clearance from the University of Oxford's ethics committee and is being conducted in the light of shared principles of respect, diversity, equity and epistemic humility.

### PRELIMINARY FINDINGS AND DISCUSSIONS

The analysis of interviews revealed both challenges that HSS researchers face, and enabling factors for HSS across the six systems, where research assessment and funding frameworks differ from each other. Some of the common challenges included the mismatch between the evaluation criteria and the common HSS research practices, the unbalanced funding and resources between HSS and other disciplines, and the misalignment between the evaluation frameworks' definitions of 'good research' and the diverse understandings and practice of 'good research' across HSS fields. However, some challenges were specific to certain systems. For instance, for the research systems where English is not the official language nor the first language of many HSS researchers, some experienced tension between the evaluation frameworks' emphasis on 'international' publications and Anglicisation, and the fact that their research orientation fits better with the local/domestic scholarship community. Findings also revealed the other side of the coin, when at times, some parameters set in the research evaluation frameworks may be particularly attuned to patterns of activity more typical of HSS research, or when the evaluation frameworks align well with HSS researchers' preferred ways of conducting research, and their understandings of the nature of research.

### REFERENCES

Bacon, F. (1989). New Atlantis and The Great Instauration (revised edition). Crofts Classics.

Comte, A. (1975). Cours de philosophie positive, vol. 1. Hermann (original work published in 1830–1842.

Donovan, C. (2019). Assessing the broader impacts of publicly funded research. In D. Simon, S. Kuhlmann, J. Stamm & W. Canzler (Eds). Handbook on Science and Public Policy (pp. 488–501). Edward Elgar Publishing. https://doi .org/ 10 .4337/9781784715946 .00036.

Frodeman, R. (2017). The impact agenda and the search for a good life. Palgrave Communications, 3(1), Article 3.

Gedutis, A., Bulaitis, Z.H. & Ochsner, M. (2023). The need for historical inquiry into societal impact evaluation: towards a genealogy of the notion of useful research. In M. Ochsner & Z. H. Bulaitis (Eds.). Accountability in Academic Life: European Perspectives on Societal Impact Evaluation (pp. 30–50). Cheltenham: Edward Elgar Publishing.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzmann, S., Scott, P., & Trow, M. (1994). The New Production of Knowledge. The Dynamics of Science and Research in Contemporary Societies. Sage Publications.

Graham, L. (1987). Science, Philosophy, and Human Behavior in the Soviet Union. New York: Columbia University Press.

Kant, I. (1979). The Conflict of the Faculties. Der Streit der Fakultäten. Abaris Books. (Original work published in 1798).

Wróblewska, M. N. (2021). Research impact evaluation and academic discourse. Humanities and Social Sciences Communications, 8, Article 58. http://doi.org/10.1057/s41599-021-00727-8 Ахиезер, А. (1991). Идеология — предмет науки, наука — элемент идеологии [Ideology is an object of science, science is an element of ideology] // Общественные науки и современность, 1991, 1, 83–89.

# Practice-Based SSH Research: Towards a Better Understanding and Evaluation

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### BACKGROUND AND OBJECTIVES

There have been substantial efforts to explore the concept of research quality and impact in Social Sciences and Humanities (SSH) (e.g. Hug et al. 2013; Muhonen et al. 2020; Ochsner et al. 2013) and expand the notion of research in research evaluation systems. Nevertheless, those systems still tend to overlook and disadvantage significant forms of SSH. These include practice-based research (PBR), which is a form of research conducted by practitioner-researchers (or teams composed of researchers and practitioners) as part of their professional practice to improve the outcomes of that practice. On the one hand, the societal impact of PBR has been increasingly highlighted due to its close relation to real-life practice and its ability to bridge the research-practice gap (Joyce and Cartwright 2020). On the other hand, many PBR studies often fail to meet the criteria of research quality typically used in research evaluations (Oancea and Furlong 2007; Wyse et al., 2021) due to their practical orientation and focus on external (rather than internal) validity.

One of the main challenges to expand the concept of research in evaluation systems to include PBR-relevant criteria is the lack of cross-disciplinary understanding of the quality and impact of PBR. Due to PBR's primary focus on local, contingent and stakeholder-oriented contexts, knowledge about PBR's quality and impact has been developed within disciplinary silos and thus remains fragmented and unstructured. This study is part of a research project (project number: 501-D203-20-5004310) which aims to increase knowledge about PBR practices and outcomes, and thus set the stage for the development of cross-disciplinary PBR evaluation criteria. This study focuses on exploring the relationship between research and practice in practice-based SSH studies.

METHODS

The study uses bibliometric analysis of PBR publications and an Al-assisted scoping review of 127 PBR studies. Bibliometric analysis was applied to verify: (1) to what extent PBR has been used in SSH research and (2) in which research fields PBR has been most prominent. To identify PBR publications, we developed a search query based on a narrative review and using Prophy.Science, which is an Al driven platform that provides a state of the art semantic and conventional article metadata analysis. We included selected concepts in the search query which was used to search titles, abstracts and author keywords (the "Topic" field) in the Web of Science database. We used the University of Warsaw's in-house version of the WoS.

The bibliometric analysis allowed for the identification of research fields where PBR has been most prominent. This study focuses on the analysis of two such fields in the SSH: "Education and Educational Research" (EER) and "Theatre" (T). We collected PBR publications using the WoS Citation Topics by selecting two Meso topics: EER and T. There were 575 publications in EER and 178 in T. To select PBR studies, two authors first screened abstracts and then full texts (173 in EER and 78 in T) using the following inclusion criteria: (1) empirical studies reporting findings of PBR, (2) studies conducted by practitioners/ practitioner-researchers or researchers in collaboration with practitioners, (3) studies written in English, and (4) published in 2004-2023. For the scoping review, we used the Covidence software, which allows two researchers to independently assess the relevance of studies. Finally, 74 studies in EER and 53 in T were included in the scoping review. Data from the articles were extracted both manually and with the support of ChatGPT 4.0, which was used to summarize and extract key information including the PBR approach, model, methods, participants, and researcher status. This Al-assisted phase allowed for a quick initial review, aiding in the identification of trends and methodologies. However, recognizing AI's limitations, we conducted a thorough manual analysis for accurate interpretation and to draw conclusions that align with our research goals.

### PRELIMINARY RESULTS

The bibliometric analysis shows that PBR has been most frequently used in Clinical & Life Sciences (CLS) and SSH. In terms of the number of articles, the most important Meso topics were: Nursing, Psychiatry & Psychology, Education & Educational Research, Diabetes and Allergy, while in terms of the importance of the PBR for the Meso topic (the share of PBR studies within all studies in that Meso topic) the leading disciplines were: Theater, Nursing, Psychiatry & Psychology, Auto-inflammatory Diseases, and Art. The analysis demonstrates that PBR has been particularly important for Theatre scholars: the increase in the number of PBR Theatre studies in the last two decades (relatively to all Theatre studies) was by far the largest of all SSH and STEM fields. This growth can be linked to the inclusion of higher art education institutions into research evaluation systems and the progressive academisation of art disciplines (Lewandowska et al. 2023).

The qualitative analysis of PBR studies in T and EER focused on the occupational roles and research engagement of practitioners and researchers in PBR studies. We identified four different types of PBR: "Professional PBR": Practitioners use PBR to explore and improve their professional practice (e.g. a teacher examines her teaching methods using PBR) (47% of studies in EER, 19% of studies in T); "Collaborative PBR": Researchers (academics) conduct PBR collaboratively with practitioners (e.g. teachers, artists) (23% in EER, 81% in T); "Evaluation of PBR": Practitioner-researchers conduct PBR projects to evaluate the effectiveness of PBR (e.g. an academic teacher explores how participation in PBR projects affects their students' teaching skills) (15% in EER); "Peer PBR": PBR conducted by a group of peers working in the same setting (e.g. school, theatre, community o practice) usually to improve the organizational aspects of practice (15% in EER). This typology demonstrates that there are variations in how practitioners and stakeholders collaborate within PBR, and highlights the specificities of SSH practice-based research which should be taken into account in the evaluation process.

### REFERENCES

Hug, S. E., M. Ochsner, and H.-D. Daniel. (2013). Criteria for Assessing Research Quality in the Humanities: A Delphi Study among Scholars of English Literature, German Literature and Art History. Research Evaluation 22 (5): 369–83.

Joyce, K. E., Cartwright, N. (2020). Bridging the Gap Between Research and Practice: Predicting What Will Work Locally. American Educational Research Journal, 57(3): 1045–1082.

Lewandowska, K., Kulczycki, E., Ochsner, M. (2023). Evaluation of the Arts in Performance-Based Research Funding Systems: An International Perspective. Research Evaluation, 32(1): 19-31.

Muhonen, R., Benneworth, P., & Olmos-Peñuela, J. (2020) From Productive Interactions to Impact Pathways: Understanding the Key Dimensions in Developing SSH Research Societal Impact. Research Evaluation, 29(1): 34–47.

Oancea, A., & Furlong, J. (2007). Expressions of Excellence and the Assessment of Applied and Practice-Based Research. Research Papers in Education, 22(2): 119-137.

Ochsner, M., Hug S.E., & Daniel, H.-D. (2013). Four Types of Research in the Humanities: Setting the Stage for Research Quality Criteria in the Humanities. Research Evaluation, 22(2): 79-92.

Wyse, D., Brown, Ch., Oliver, S. and Poblete, X. (2021) Education Research and Educational Practice: The Qualities of a Close Relationship. British Educational Research Journal, 47(6): 1466-1489.

# DAY 1 SESSION 1.2 / Publishing in SSH



## The Geographic Focus of SSH Books in the Library of Congress

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As one of the three de facto national libraries of the United States, the Library of Congress LoC) is one of the world's largest libraries. Its primary mission is to "serve Congress with the highest quality of research, analysis, information, and confidential consultation to support the exercise of its legislative, representational, and oversight duties in its role as a coequal branch of government." To support this critical mission, the library has developed its collection with a strong national interest in mind (Aikin, 2010; Cronin, 1966). In light of this policy orientation and the sheer size of the collection of the Library of Congress, we are investigating the geographical coverage of its book collection in the social sciences, humanities, and the arts (SSH) and how the shift of the coverage may mirror the changing national and foreign policies of the United States, as well as the foci of U.S. political discourse.

In this extended abstract, we present the preliminary results from this project, providing descriptive views on the geographic focus of books in the collection published between 1970 and 2019. In particular, we examine the following questions:

- 1. How has the geographic distribution of the LoC's SSH collection changed over time?
- 2. How do evolutions in the geographic focus of the collection reflect or coincide with the economic developments and historical events in those countries?
- 3. How are the top countries associated with specific SSH fields in the LoC collection, and what patterns emerge?

We obtained data from the LoC's 2019 metadata dump of its book collection (Library of Congress, 2019), which consists of 11.28 million full metadata records of books encoded in the Machine-Readable Cataloging (MARC) format. We used the Library of Congress Classification number (which includes 22 major categories that cover all major knowledge domains) in the metadata records to determine the disciplinarity of the book. We mapped the categories into the major knowledge domains (i.e., Science and technologies, Social Sciences, and Humanities). We found that the majority of records belong to SSH (82.5%), which is the focus of the present study. From the original dataset, we only acquired 6.2 million SSH books that were published between

1970 and 2019 and were fully curated by librarians based on the *Encoding Level* code. In this collection, subject labels were supplied by professional librarians using the Library of Congress Subject Heading (LCSH), one of the most popular controlled vocabularies for subject information in library collections. Whereas LCSH includes various types of subject information, such as personal names and work titles, our study particularly focuses on topical subject terms (recorded in field 650 of MARC 21 format) and geographical subject terms (in field 651), the two most frequently used categories of subject information in our data. For topical subject terms, subject codes such as geographic names and geographic subdivisions can provide information on the geographic focus of books, e.g., the geographic name could be Belgium and the geographic subdivision could be Antwerp, in addition to another main topical subject. For geographic subject terms, it can take forms such as 'Knox County (Tenn.)', which requires some processing before matching to a country.

We extracted all geographical information for the two metadata fields (using the subfield z of 650 and subfield a of 651) and matched them with country-level names in the Geonames dataset. Among 3.6 million books with any geographic information in fields 650 and 651, 98.2% of them are linked with at least one entry in Geonames, representing places around the world that the books discuss.

Our results show that the LoC collection has become increasingly more diverse in its geographical focus over time (Figure Ia). In the 1970s, the vast majority of books were focused on three primary regions: North America (28%), Western Europe (17%), and Northern Europe (12%). However, four decades later, while North America remains the most represented area, its share has reduced to 22%, closely followed by East Asia (15%). Regions such as Eastern Europe, Western Asia, Southern Europe, South Asia, and Southeast Asia have also seen their representations increase by 1–3 percentage points from the 1970s to the 2010s (Figure Ib).

On the level of individual countries, we analyzed the top 20 countries featured in LoC books and their changes over time (Figure 1c). This analysis reveals a fascinating alignment between changes in the proportion of LoC books concerning specific countries and those countries' historical developments. For example, there was a significant increase in the share of books about Japan during the 1980s, coinciding with Japan's economic and technological boom and its trade frictions with the U.S. Similarly, for Mainland China, a marked increase is noted post-Reform and Opening-up, with another surge, cooccur with China's entry into the World Trade Organization in the new century. Additionally, an intriguing correlation is observed between the rising proportion of books about certain non- Anglophone countries and an increase in publications in those countries' native languages.

Do some countries feature more prominently in certain topics? To explore this, we utilized the classification number from the data based on the Library of Congress

Classification (LCC) to examine topical preferences across various countries (Figure 1d), by using the revealed comparative advantage index.

- 1.0 -Northern America 0.15 -0.8 Eastern Asia 0.10 since 1970 Eastern Asia Eastern Europe 0.6 -0.05 -Southern Europe outhern Europe Percent change outh-eastern Asia Western Europe 0.00 0.4 -Latin America and th Saharan Africa proportion Eastern Europe -0.05 -Northern Europe Northern America Southern Asia 0.2 -Northern Europe -0.10 -Saharan Africa -0.15 0.0 -2010 1970 1980 1990 2000 2010s 1990s Year **Central Asia** 197 Region
- a. Evolution in LoC collections b. Proportion change of regions

#### c. LoC collections on countries and language profiles



Figure 1. The geographic focus of SSH books in the Library of Congress. a. the regional profile of the content of LoC collections in three decades; b. change in proportions for various regions from 1970 to 2015. Lines smoothed by 3-year moving averages; c. the proportion of some countries in all LoC collections over time (black line) and their publishing languages (colored area); d. representative topics of some regions, with colors indicating a higher-than-expected preference for the selected topic.

We observed the following patterns. Notably in Social Sciences and Humanities (SSH), European countries, particularly Italy, show a higher representation in books on the domain of Music and Fine Arts. Countries in Western Asia, the Aegean Sea bordering regions, and North Africa are more frequently represented in the domain of History. Additionally, Western and Central African countries appear more prominently in the domain of Political Science.

The preliminary results presented above uncover the dynamic evolution of global knowledge representation in the LoC book collection, one corpus that has rarely been examined in scientometrics and science of science. In summary, we observe an increasing diversification of geographic focus in collections of the Library of Congress, shifting from a primary focus on North America and Europe in the 1970s to a wide coverage of multiple regions around the globe. We discuss the evolution of books on Japan and China and how it coincides with their historical developments. Moreover, with examples from SSH, we show how topics of books may be more representative in certain countries which may illustrate specific interest towards certain countries in US political discourse. Overall, we provide a first attempt at delineating the geographic focus of the Library of Congress which may serve as a potential barometer to interpret US political and legislative trends.

In our next phase of research, we'll explore the geographic focus of the U.S. LoC's collection at the state level. We aim to see if changes in the volume and content of books about specific states mirror shifts in U.S. domestic politics and whether this focus is evenly distributed across the country. We hope to discern how the library's collection aligns with the changing landscape of U.S. political discourse.

### Towards a Situated Notion of Research Quality: An Exploratory Study of Three Journal Quality Frameworks

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Based on its perceived objectivity, WoS and Scopus have been largely perceived as sources of journal authority (Lillis & Curry, 2010). However, its status has recently been contested due to its linguistic, geographical, and disciplinary biases (Archambault et al., 2006; Chavarro et al., 2017; Asubiaro et al., 2023). Academic literature on journal quality has also started to pay more attention to qualitative criteria -based on the fulfillment of specific conditions that vary depending on the evaluator (Pölönen et al., 2021)– as opposed to quantitative/objective criteria –based on citations (e.g., Garfield, 1999; Saha et al., 2003). In a recent study, Dunleavy (2022) identifies quantitative criteria with 'research impact' rather than 'research quality', which is highly related to the internal policies of journals. Qualitative criteria thus serve as guidelines to assess if a journal meets specific guality standards. Moreover, in the last years, many scholars and organizations have argued that quantitative metrics are heavily context-dependent and proposed new evaluation methods based on mixed or qualitative evaluations (e. g. Hicks et al., 2015; or COARA, 2022). However, when qualitative criteria are used, other difficulties arise -i.e. there is no unique framework used by scholars or indexing platforms, but many, depending on the evaluator's priorities. An example of the significant differences between evaluators is the simultaneous inclusion of the same journals in allowlists and blocklists (Strinzel et al., 2019). Following previous literature on the topic, this project distinguishes research impact from research quality and explores the subjective criteria employed by several Journal Indexing Systems (JIS). This exploratory analysis specifically studies three quality frameworks: the Web of Science (WoS) journal evaluation process; the Scopus content policy and selection; and the Journal Publishing Practices and Standards (JJPS), employed by the Journals OnLine project (JOL), a network of local journal platforms to help Southern journals increase their global visibility and improve their publishing practices.

Following previous literature on the topic (for instance, Moradzadeh et al., 2022), this study uses thematic analysis to identify themes and subthemes regarding journal quality. The analysis was conducted in three steps. First, I read the quality criteria of the three frameworks and coded their topic. Coding categories were not developed *apriory* but inductively as a result of an iterative process where new codes were created until the saturation point was reached. Second, I classified the topics into broader concepts. Third, the codes and concepts were compared with previous

literature on the topic to verify that they were consistent with previous research. The analysis resulted in 33 quality criteria classified into five main themes: (i) journal content and structure, (ii) journal policies, (iii) scientific rigor, (iv) editorial structure, and (v) publication volume and availability. The results show that, although sharing some common criteria, each evaluation system analyzed has different priorities and understandings of what quality means and what the minimums a journal must accomplish. Giving traditional JIS the monopoly of journal quality creates profound asymmetries between journals and regions. It also contributes to a hierarchical perception of science, where journals outside these indexes are automatically associated with mediocrity. The emergence and growth of alternative JIS have offered other perspectives and highlighted the biases traditional indexes present, challenging WoS's and Scopus's objectivity and their position as the only valid cognitive authorities (see Asubiaro & Onaolapo, 2023; Asubiaro, Onaolapo & Mills, 2024; Chavarro, Rafóls & Tang, 2017; and for the specific case of this project Alonso-Alvarez, 2024). This analysis shows the existence of similarities between the quality criteria employed by traditional and alternative JIS and the presence of other more subjective factors that depend on the JIS's priorities.

Moreover, ignoring that specific quality criteria and guidelines have been developed in concrete socio-historical contexts and represent a limited conception of how science should be produced and disseminated reduces quality to a unique vision and promotes WoS and Scopus as reference points for journal and editorial standards. It also places traditional indexes as the only credible sources of knowledge and, therefore, as cognitive authorities (see Chavarro, 2017, pp. 45–49). Therefore, this article claims a 'situated' nature of quality, which, echoing Albornoz and colleagues (2020), needs to be contextualized, and claims a 'critical reflective process for identifying and assessing how different forms of epistemic injustice are deeply embedded in the current global knowledge production system' (Albornoz, Okune & Chan, 2020, p. 66). Ignoring this situated nature might also constitute what Medina (2017) identifies as a semantically produced epistemic injustice, as quality aspects conceived by different communities would be removed from the meaning of research quality.

The analysis of the quality criteria used by different academic databases contributes to the discussion on measuring research excellence and offers a new perspective on the objectivity of quality criteria. Therefore, comparisons between different quality frameworks can help to show the existence of multiple approaches to research quality, which can be further explored by historical and contextual analysis. This project plans on expanding the analyses presented here to include other alternative and regional indexes to further explore their scientific and journal quality perspectives and thus advance towards a situated notion of research quality.

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### REFERENCES

Albornoz, D., Okune, A., & Chan, L. (2020). Can open scholarly practices redress epistemic injustice. Reassembling scholarly communications: Histories, infrastructures, global politics 65-79. and of open access, https://doi.org/10.7551/mitpress/11885.001.0001

Alonso-Álvarez, P. (2024). Exploring research quality and journal representation: A comparative study of African Journals Online, Web of Science, and Scopus. *OSF*. <u>https://doi.org/10.31235/osf.io/tchxz</u>

Archambault, É., Vignola-Gagné, É., Côté, G., Larivière, V., & Gingrasb, Y. (2006). Benchmarking scientific output in the social sciences and humanities: The limits of existing databases. *Scientometrics*, *68*(3), 329–342. <u>https://doi.org/10.1007/s11192-006-0115-z</u>

Asubiaro, T. V., & Onaolapo, S. (2023). A comparative study of the coverage of African journals in Web of Science, Scopus, and CrossRef. *Journal of the Association for Information Science and Technology*, 74(7), 745–758. https://doi.org/10.1002/asi.24758

Asubiaro, T., Onaolapo, S. & Mills, D. (2024) Regional disparities in Web of Science and Scopus journal coverage. *Scientometrics,* 129, 1469–1491. <u>https://doi.org/10.1007/s11192-024-04948-x</u>

Chavarro, D. (2017). Universalism and particularism: Explaining the emergence and growth of regional journal indexing systems [Thesis, University of Sussex]. https://sussex.figshare.com/articles/thesis/Universalism\_and\_particularism\_explainin g\_the\_emergence\_and\_growth\_of\_regional\_journal\_indexing\_systems/23440772/1

Chavarro, D., Ràfols, I., & Tang, P. (2018). To what extent is inclusion in the Web of Science an indicator of journal 'quality'? *Research evaluation*, 27(2), 106–118. <u>https://doi.org/10.1093/reseval/rvy001</u>

COARA Agreement on Reforming Research Assessment. (2022). Retrieved from <a href="https://coara.eu/app/uploads/2022/09/2022\_07\_19\_rra\_agreement\_final.pdf">https://coara.eu/app/uploads/2022/09/2022\_07\_19\_rra\_agreement\_final.pdf</a>

Dunleavy, D. J. (2022). Progressive and degenerative journals: On the growth and appraisal of knowledge in scholarly publishing. *European Journal for Philosophy of Science*, 12(4), 61. <u>https://doi.org/10.1007/s13194-022-00492-8</u>

Garfield, E. (1999). Journal impact factor: a brief review. *Cmaj*, 161(8), 979–980.

Hicks, D., Wouters, P., Waltman, L. *et al.* Bibliometrics: The Leiden Manifesto for research metrics. *Nature* 520, 429–431 (2015). <u>https://doi.org/10.1038/520429a</u>

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Lillis, T. M., & Curry, M. J. (2010). *Academic writing in global context*. London: Routledge.

Moradzadeh, M., Sedghi, S., & Panahi, S. (2023). Towards a new paradigm for 'journal quality' criteria: a scoping review. *Scientometrics*, 128(1), 279–321. <u>https://doi.org/10.1007/s11192-022-04520-5</u>

Pölönen, J., Guns, R., Kulczycki, E., Sivertsen, G., & Engels, T. C. (2021). National lists of scholarly publication channels: An overview and recommendations for their construction and maintenance. *Journal of Data and Information Science*, *6*(1), 50–86. https://doi.org/10.2478/jdis-2021-0004

Saha, S., Saint, S., & Christakis, D. A. (2003). Impact factor: a valid measure of journal quality? *Journal of the Medical Library Association*, 91(1), 42.

Strinzel, M., Severin, A., Milzow, K., & Egger, M. (2019). Blacklists and whitelists to tackle predatory publishing: a cross-sectional comparison and thematic analysis. *MBio*, *10*(3), 10-1128. <u>https://doi.org/10.1128/mbio.00411-19</u>

Characterizing Canadian Journals of The Social Sciences, Arts and Humanities and Their Role in the Dissemination of Canadian Research

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### INTRODUCTION

Approximately 600 journals associated with the social sciences, arts and humanities (SSAH) are based in Canada (Larivière et al., 2021). The vast majority are independent from commercial structures and are run by university departments, learned societies and professional associations. They contribute to maintaining scholarly publishing in French, one of Canada's official languages, with more than half accepting French-language articles. The importance of these domestic journals is acknowledged by federal and Québec funding agencies, providing funding for a total of almost 150 journals. Despite a long-standing tradition of publishing in domestic journals, some of these have recently been acquired by foreign-based commercial publishers, possibly motivated by an interest in stabilizing their financial situation or by the likelihood of being indexed by the dominant bibliographic databases, such as Web of Science. In parallel, increasing numbers of French-Canadian researchers sense an urgency to publish in English in 'high-impact' journals based abroad (Larivière, 2018). These trends are likely to compromise the diversified and resilient Canadian scholarly publication ecosystem in the long term.

The aim of our study was to detail the specific role of domestic SSAH journals for Canadian researchers. Specifically, we aimed to evaluate the characteristics of Canadian-authored articles, including the scope of the research, language, and open access (OA). The relatively poor quality of indexing of domestic SSAH journals (van Bellen, 2023) necessitated a comparative approach, which included three samples of journals, each only including articles signed by at least one Canadian author. The first sample represented non-profit domestic journals, which included the Canadian SSAH journals disseminated on Érudit (erudit.org), Canada's national research dissemination platform with close to 300 scholarly journals. The second sample was composed of the domestic journals published by the five major commercial publishers: Elsevier, Springer Nature, Wiley, Taylor & Francis, and SAGE. The final sample included foreign-based journals published by the same commercial publishers.

### METHODS

We used the Dimensions database as a source for the commercial publishers' journals (Digital Science, 2018) and internal data from Érudit for the analyses of non-profit journals. We limited the samples to the publication years 2015-2021. The scope of each article was defined by the presence of words referring to Canada or its provinces or territories, either in the title or the abstract of the article. OA status was retrieved using Unpaywall (Priem & Piwowar, 2018). Finally, we identified the 'working language' of each author, which was based on the language of the institution of affiliation, including French, English, Other, or a combination of these.

For Canadian researchers, domestic journals are of particular interest for the publication of research on national or regional topics (Figure 1). Proportionally, they are two to three times more likely to present research on Canadian topics compared to foreign-based journals.





**Figure 1:** Proportion of Canadian articles having a Canadian scope, for different journal types and disciplines.

A marked difference is also observed in OA availability. When published in domestic non-profit journals, more than 80% of Canadian researchers' articles are available in OA (Figure 2). In contrast, commercial publishers' journals present only 16-27% of Canadian articles in OA. National non-profit journals generally do not charge 'article processing charges', in contrast to many commercial journals which generally adopt an 'author-pays' approach. Such a model has been shown to be very costly for Canadian authors, or the libraries and funders that support them (Butler et al., 2022).



Figure 2: Types of open access at the article-level, for different journal types and disciplines.

Regarding language, commercial journals relatively rarely allow publishing in French, and this is even the case for those that are published in Canada. Maintaining a healthy ecosystem of domestic non-profit journals is directly related to the willingness of French-language researchers to publish in their language, because French-language publishing is one of the main characteristics of these journals. We found multiple factors are linked to the use (or not) of French by Canadian researchers, such as the geographic and linguistic origins of co-authors as well as the scope of the research (Figure 3). The use of French is most frequent when Canadian francophone researchers publish together on a national/regional topic: more than half of those articles are in French. Unsurprisingly, a collaboration between French-Canadian and foreign-based researchers using other languages leads very rarely to a publication in French, at only 4% to 5% of the articles. Interestingly, an international francophone collaboration, for example Canada-France, does not (at all) guarantee an article in French: French articles are proportionally only half as frequent compared to a national francophone collaboration (Figure 3). It appears that the scope of the research topic strongly influences the language of publication. The use of French is much more frequent for articles presenting a national or regional topic, irrespective of the composition of the authorship.

#### Arts & Humanities



**Figure 3:** Proportion of articles in French, signed by at least one Canadian francophone author, for different types of collaboration and scopes of research. The percentage and the colour represent the proportion of articles in French; the size of the circle represents the total number of articles.

### CONCLUSION

For Canadian researchers, the domestic non-profit journals stand out in terms of the prevalence of national topics, the possibility to publish in French and the accessibility to open access. Our data suggest that, for researchers at French-language institutions, the attraction of English-language publishing in foreign-based journals is strongly linked to the origin of their collaborators, in addition to the scope of the research. Thus, current governmental funding opportunities to stimulate international

collaboration may contribute to the shift in research scope from national to international which would, as a corollary, negatively affect the use of French in publishing.

Canadian SSAH research policies value cross-sectoral research, the creation of national and international research networks, the development of scientific communication for the public, the promotion of open access and the integration of best practices in terms of equity, diversity and inclusion. In Canada, non-profit journals fulfil many of these, and they often seem better suited in this respect than commercial and foreign-based journals. For this reason, policies should be developed to promote the use of these journals by Canadian researchers, firstly by revising the ways in which researchers are evaluated, but also by stimulating research on national themes. Similarly, in a context of precarity for many domestic journals, support from government bodies, universities and learned societies should reflect the benefits these journals bring to Canadian society.

### REFERENCES

Butler, L.-A., Matthias, L., Simard, M.-A., Mongeon, P., & Haustein, S. (2022). The oligopoly's shift to open access publishing: How for-profit publishers benefit from gold and hybrid article processing charges. Proceedings of the Annual Conference of CAIS / Actes Du Congrès Annuel de l'ACSI. <u>https://doi.org/10.29173/cais1262</u>

Digital Science. (2018). Dimensions [Computer software]. https://app.dimensions.ai

Larivière, V. (2018). Le français, langue seconde? De l'évolution des lieux et langues de publication des chercheurs au Québec, en France et en Allemagne. Recherches sociographiques, 59(3), 339–363. Érudit. <u>https://doi.org/10.7202/1058718ar</u>

Larivière, V., Delmas, È., Beth, S., Paquin, É., & van Bellen, S. (2021). Les revues savantes canadiennes en sciences humaines et sociales—Portrait quantitatif et qualitatif (p. 47).

https://www.erudit.org/public/documents/Revues\_canadiennes\_shs\_2021.pdf

Priem, J., & Piwowar, H. (2018). The Unpaywall Dataset. <u>https://doi.org/10.6084/m9.figshare.6020078.v1</u>

van Bellen, S. (2023). "O Author, Where Art Thou?" An Analysis of Affiliation Indexing in Canadian Journals and Bibliometric Research Potential. 6 p. <u>https://cais2023.ca/talk/04.bellen</u>

## Editorial Boards of Italian Legal Journals: A Case Study in Civil Law

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### INTRODUCTION

Academic journals are essential for validating research, managing peer review, and influencing scholars' career trajectories through publication decisions (Card and DellaVigna, 2020; Horbach and Halffman, 2020; Zhang et al., 2021b). However, there is a noticeable dearth of comprehensive information regarding the composition and characteristics of scholarly journal editorial boards. Instances of gender underrepresentation on editorial boards, alongside authors' preferences, in scholarly production, for the journals of which they are editors, raise concerns about whether peer-review systems are fair. Such biases underscore the significant impact editors wield in shaping the scientific discourse.

Despite the wealth of scientific literature examining the influence and consequences of editorial work, data on editorial boards are fragmented and lack standardized accessibility, hindering systematic analysis. Nevertheless, various studies have explored aspects such as gender representation, international diversity, economic disparities, social networks, institutional affiliations, and publication ethics within editorial boards (Feeney et al., 2019; Okagbue et al., 2018; Horton, 2003; Baccini et al., 2020; Goyanes and de-Marcos, 2020; Bishop, 2020).

### OBJECTIVE

This investigation is situated within the framework of editormetrics. Specifically, our study investigates the composition of editorial bodies within a selection of Italian law journals. We focus on dimensions such as gender, affiliation and career profile, as well as on the existence and extent of networks induced by co-occurrence of members of editorial bodies among journals. The focus is on the representation of diversity and inclusivity in editorial bodies of Italian law journals on the specific branch of civil law. Chosen for investigation, this field of law stands out due to its traditional nature and expansive scope, covering a variety of topics such as contract law, property law, obligations, successions, family law. In particular, we specifically identify:

 the share of women and men as editors in chief or part of the board of directors;

- the specific position of the members of editorial bodies (academic or professional);
- whether there are differences in academic position between editors in chief and board of directors and scientific committee;
- the distribution of the involvement of each individual in several journals;
- the allocation of members from foreign institutions within the editorial bodies;
- the existence of a cluster of universities that leads the civil law journals;
- the extent to which editorial board members of specific journals are authors of contributions in the same journals ("self publication").

### DATA SOURCES

The following data sources were used to carry out this survey:

- The DoGi Dottrina Giuridica database by the Istituto di Informatica Giuridica e Sistemi Giudiziari (IGSG-CNR). Throughout its history, DoGi has indexed approximately 700 journals during various periods. Currently, about 250 law journals are actively indexed. [http://dati.igsg.cnr.it/dogi] (hereafter DoGi)
- The research personnel database managed by the Ministry of Universities and Research [http://cercauniversita.cineca.it/php5/docenti/cerca.php] (hereafter CINECA)

### DATA COLLECTION AND SOME ENCOUNTERED DIFFICULTIES

Based on the DoGi dataset, the set of journals on civil law was extracted (39 law journals). For each journal, the individuals comprising the following bodies were identified through a search on the publishers' or journals' websites: editor in chief, board of directors, scientific committee, editorial committee. During our analysis, we encountered this terminology and the roles and functions of these bodies were not always clear. Nonetheless, it's certain that all these entities contribute to the organization, scientific quality, and governance of the journal investigated.

The composition and functions of these bodies vary across journals, making it difficult to identify editors in chief and members of the different bodies. Data lacks uniform structure, hindering machine readability. Disparities are observed across publishers and within the same publisher, with roles and affiliations only occasionally indicated. As a result, extensive manual search and data normalization were required to address these discrepancies.

An enhancement of the editors' dataset was undertaken to deduplicate authors, attribute gender, and enrich the dataset with additional features, such as affiliations and career information obtained through cross-referencing with research personnel databases and web searches. Normalization and disambiguation of editors' names involved a semi-automatic process, which included automatic clustering of similar names and manual disambiguation of ambiguous clusters.

To attribute affiliations and careers, searches were conducted within the CINECA database. For names not found, web searches were performed, posing challenges in determining individual roles and positions. The names not found in the CINECA database, which includes only active university personnel, comprise adjunct professors, professors emeriti, and legal professionals (judges, lawyers, etc.). For this last category, roles were assigned without affiliations. Considerations were also made for deceased individuals still listed on editorial boards.

### SOME RESULT

The analysis particularly focused on two bodies seen as representing the Italian scientific community within academic journals: editor in chief and the board of directors. The belonging to either of the two bodies (EC & BD) has been considered as a unique object of analysis. A total of 341 individuals were identified, with 90 participating in EC & BD of multiple journals. Among these, 13 were found to be in EC & BD of 4 or more journals. Notably, all 13 individuals held positions as full or professors emeriti. Furthermore, 251 individuals were involved in only one EC & BD.

Regarding the academic profile within the EC & BD, 54% of individuals were identified as full professors, while 13% were categorized as professors emeriti. This latter category holds importance in Italian academia, particularly within scientific committees, as it enhances the prestige of the journal. The significant presence of professors emeriti adds an intriguing dimension to the analysis, as EC & BD are inherently active bodies within scholarly publishing.

Gender analysis was focused specifically on the editorial leadership, to assess the representation of women as editors in chief of journals, comprising 152 individuals. 32 (21%) were women and 120 (79%) were men. Women were represented in 16 out of the 39 journals, with 11 journals having only one woman. No women were present among the editors in chief for the remaining 23 journals.

In terms of co-occurrence of members of the board of directors among different journals, it was observed that 11 out of the 39 journals examined shared four or more individuals. This reveals the existence of a cluster of strongly connected journals which is evident in the visual exploration of the network of journals constructed by establishing edges among journals for each shared board member.

Regarding the affiliation of individuals, our focus was on the composition of the scientific committee, which, from a perspective of diversity and inclusion, should include experts with both national and international provenance. As concerns geographical coverage the highest percentage of individuals is affiliated with universities in Rome (6 universities) and Milan (4 universities). This distribution raises questions about the geographical representation and diversity within the scientific committees of these journals
Another critical analysis currently undergoing refinement is related to "selfpublication". Preliminary analysis of 5 journals revealed that a significant percentage of individuals belonging to all the 4 bodies under investigation were also authors in the same journal, with some making a relevant number of contributions (up to 10 non editorial articles).

### CONSIDERATIONS

This research represents the first systematic analysis of editorial board composition within the legal domain in a national context. While studies on the significance of editorial boards in legal scientific journals are scarce, our examination sheds some light on crucial editormetrics issues. Incorporating editormetrics into research evaluation can broaden recognition beyond traditional publications, aligning with evolving research evaluation principles. Future investigations could compare Italian law journals of different legal branches to explore potential differences among subfields and identify distinct editorial board clusters.

### BIBLIOGRAPHY

Baccini, Alberto, et al. "Intellectual and social similarity among scholarly journals: An exploratory comparison of the networks of editors, authors and co-citations." Quantitative Science Studies 1.1(2020): 277-289.

Bishop D. "PEPIOPs—Prolific Editors Who Publish in Their Own Publications". BishopBlog (2020) <http://deevybee.blogspot.com/2020/08/pepiops-prolificeditors-who-publish-in.html> accessed 23 April 2024.

Card, David, and Stefano DellaVigna. "What do editors maximize? Evidence from four economics journals." Review of Economics and Statistics 102.1 (2020): 195-217.

Feeney, Mary K., Lisa Carson, and Helen Dickinson. "Power in editorial positions: A feminist critique of public administration. "Public Administration Review 79.1 (2019): 46-55.

Goyanes, Manuel, and Luís De-Marcos. "Academic influence and invisible colleges through editorial board interlocking in communication sciences: a social network analysis of leading journals." Scientometrics 123 (2020): 791-811.

Horbach, Serge PJM, and Willem Halffman. "Journal peer review and editorial evaluation: cautious innovator or sleepy giant?" Minerva 58.2 (2020): 139-161.

Okagbue, Hilary I., et al. "Exploration of editorial board composition, Citescore and percentiles of Hindawi journals indexed in Scopus." Data in Brief 19 (2018): 743-752.

Zhang, Lin, et al. "On the relationship between interdisciplinarity and impact: Distinct effects on academic and broader impact." Research Evaluation 30.3 (2021): 256–268.

# DAY 1 POSTERS SESSION

# International Collaboration in SSH: Looking Further Than the Web of Science

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In 2019, a new parameter was added to the Flemish performance-based research funding system for universities to incorporate international collaboration in Flemish research publications. Therefore, the Flemish Academic Bibliographic Database for the Social Sciences and Humanities (VABB-SHW), compiling academic SSH publications and serving as an instrument for funding distribution, required an extension with author affiliation data for all co- authored SSH publications. As less than half of the targeted VABB-SHW publications are included in the Web of Science (WoS), author affiliations had to be collected alternatively for the remaining publications (almost 25,000 for a ten-year time window). As a result, the implementation of the internationalization parameter not only led to data about Flemish international SSH collaboration outside the WoS, but also delivered a methodology for a multifaceted affiliation data collection operation.

The arrival of complementary author affiliation data enhances insight in international co- authorship in the Flemish academic SSH landscape. The nature of VABB-SHW – a strict differentiation between WoS and non-WoS publications – allows a mutual comparison on multiple levels, among them academic discipline, language and publication type. As the amount of international collaboration in SSH is much debated, author affiliation data for a broader range of publications, including those beyond the WoS, can now provide a more precise idea of the degree of international collaboration in terms of co-authorship.

The project showed that the retrieval of author affiliation data for non-WoS publications requires a multidimensional approach. Matching with alternative citation databases (Scopus, Crossref, ...) is one component of the strategy, but by far the only one. Web searches, consulting university repositories, visiting academic libraries and even direct communication with authorsare necessary steps to obtain a comprehensive dataset. Furthermore, data retrieval goes hand in hand with consistent data registration: all affiliated organizations were mapped to unique (ROR) organization identifiers. Missing links were discovered as a substantial part of the organizations could not be coded with the available set of identifiers. A codification of the methodology, both for retrieval and registration, may contribute to assist future projects. The poster will zoom in on insights in Flemish international SSH collaboration.

# A Bibliometric Map of Local Research in the Social Sciences and Humanities

#### Raf Guns

University of Antwerp, Belgium

Classifications and visual representations (or maps) of the structure of science have a long tradition, dating back at least to the work of Auguste Comte. Current maps of science are typically based on processing large amounts of data on research projects, publications, or other entities (Klavans & Boyack, 2009). This implies that a map may underrepresent research areas that are only partially covered in the data source used.

The social sciences and humanities (SSH) have been less well-represented in maps of science due to biases in source data in terms of language, publication type and discipline. Rather than relying on citation data (e.g., Leydesdorff et al., 2011), I propose that comprehensive national databases (Sīle et al., 2018) are a suitable data source, if abstracts are included.

I present a map that is based on publications submitted to VABB-SHW, a comprehensive database of Flemish SSH publications. Abstracts are processed with a multilingual embedding model (Reimers & Gurevych, 2019), such that publications in different languages can be included. Embeddings are clustered into topics using HDBSCAN. Topics comprise between 99 and 1823 publications, and are labelled by GPT-3.5-Turbo, similar to Van Eck & Waltman (2024). Finally, topic embeddings are reduced to two dimensions using UMAP, allowing them to be visualized.

The resulting map reflects the structure of Flemish SSH and can visually summarize, for instance, the importance of Web of Science in each topic.

#### REFERENCES

Klavans, R., & Boyack, K. W. (2009). Toward a consensus map of science. Journal of the Association for Information Science and Technology, 60(3), 455–476. <u>https://doi.org/10.1002/asi.20991</u>

Leydesdorff, L., et al. (2011). The structure of the Arts & Humanities Citation Index: A mapping on the basis of aggregated citations among 1,157 journals. Journal of the American Society for Information Science and Technology, 62(12), 2414–2426. https://doi.org/10.1002/asi.21636

Reimers, N., & Gurevych, I. (2019). Sentence-BERT: Sentence Embeddings using Siamese BERT-Network. arXiv. <u>https://doi.org/10.48550/arXiv.1908.10084</u> Sīle, L., et al. (2018). Comprehensiveness of national bibliographic databases for social sciences and humanities: Findings from a European survey. Research Evaluation, 27(4), 310–322. <u>https://doi.org/10.1093/reseval/rvy016</u>

Van Eck, N. J., & Waltman, L. (2024). An open approach for classifying research publications. Leiden Madtrics. <u>https://www.leidenmadtrics.nl/articles/an-open-approach-for-classifying-research-publications</u>

# The Assessment of Innovative Scholarly Outputs

Maciej Maryl Magdalena Wnuk Tomasz Umerle

This paper contributes to the discussions about the evaluation and recognition of innovative scholarly outputs in social sciences and humanities. Against this backdrop, it reports on the current work of OPERAS Innovation Lab, which conducted case studies dedicated to innovative scholarly outputs and prototyped their evaluation.

Each case study will be presented as a reproducible workflow for researchers willing to engage with similar formats and face related challenges. Specifically, it will detail issues around: (1) setup and planning; (2) consecutive steps leading to establishing an innovative project; (3) evaluation guidelines; (4) sustainability considerations. This presentation will focus mostly on the assessment aspects of three case studies in question.

Improving the Quality and Accessibility of Metadata of Ukrainian Academic Events: Analysis of Organizational Practices and Preferences of Organizers and Scholars

#### Sabina Auhunas

TIB - Leibniz Information Centre for Science and Technology and University Library, Germany

Ukraine's academic sector is undergoing significant modernization, aligning its research and education with global open science standards (Government of Ukraine, 2022). These changes are especially visible in the development of the Ukrainian Research Information System (CRIS), which focuses on improving metadata structures about scientists, publications, projects, Universities, improving registers of academic events (conferences) and improving their quality through feedback from organizers and scholars (Kaliuzhna and Augunas, 2022).

The aim of the study is to explore and analyze organizational practices and requests among academic event organizers and scholars in Ukraine regarding the management of descriptive metadata, with a particular focus on how these practices facilitate or inhibit compliance with the principles of open science.

Our study, conducted between August and October 2022, involved an online survey with 543 event organizers and 727 scholars. Employing descriptive statistics, comparative analysis, and qualitative content analysis via RStudio, the research aimed to assess and improve academic event management (Auhunas, 2024).

A notable finding was the differing preferences for event formats between scholars and organizers. While nearly 30% of scholars favored hybrid formats, combining online and offline elements, only about 14% of organizers preferred this approach. This suggests scholars' preference for the flexibility offered by hybrid formats, whereas organizers leaned towards traditional, in-person events for their perceived benefits in direct interaction.

The research highlighted the crucial role of metadata quality in enhancing academic event quality and relevance. However, it identified a significant gap in this area, with a considerable proportion of both organizers and scholars (over 22% and nearly 40%, respectively) rating the current state of metadata quality as very poor. This finding underscores an urgent need for improvements in metadata management within Ukraine's academic environment.

In conclusion, the study emphasizes the need for advanced tools for integrating and managing academic event information at national and international levels. Addressing metadata quality issues and adapting to the evolving needs of academia is essential to improve the efficiency of organizing and participating in academic events in Ukraine. This research provides unique insights into academic event organization and metadata management, offering valuable recommendations for enhancing these processes in the future.

### REFERENCES

Government of Ukraine. (2022). Government Resolution "On Approval of the National Plan regarding Open Science," No. 892-r, October 8, 2022, Kyiv. Retrieved from <u>https://zakon.rada.gov.ua/laws/show/892-2022-%D1%80#Text</u>.

Kaliuzhna, N., and Auhunas, S. (2022). Research Information Infrastructure in Ukraine: First steps toward building a national CRIS. In *Procedia Computer Science*, 211, 230– 237. <u>https://doi.org/10.1016/j.procs.2022.10.196</u>.

Auhunas, S. (2024). Evaluation and impact of descriptive metadata on academic event management in Ukraine: A quantitative study. *Iberoamerican Journal of Science Measurement and Communication*, *4*(1), 1–30. <u>https://doi.org/10.47909/ijsmc.91</u>

# The Evaluation of Spanish Scientific Journals in Social Sciences and Humanities

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The Spanish Foundation for Science and Technology (FECYT), as an instrument for implementing science, technology, and innovation policies of the Ministry of Science and Innovation of Spain and the European Commission, carries out the process of Evaluation of the Editorial and Scientific Quality of Spanish Scientific Journals. This activity has been conducted biennially since 2008 with the main objective of improving the editorial policies of journals. To date, eight editions have been completed, evaluating approximately 1300 titles. The objective of this study is to analyse the representation of Spanish scientific journals in Social Sciences and Humanities and their quality through participation in this process and their success rate.

The characteristics of this system include voluntary evaluation, having an ISSN, delimitation of the geographical scope to journals published in Spain, covering any topic, and a minimum age of 5 years of continuous publication. This system provides Spanish journals with a guide to good editorial practices based on international standards (Coslado et al., 2010; FECYT, 2023). These criteria address aspects related to quality in editorial processes, policies on open access, visibility and impact, and gender perspective (Coslado et al., 2023).

The sample used reflects that 11.50% are journals in Life Sciences, 7.05% in Experimental Sciences, 41.47% in Social Sciences, and 39.99% in Humanities. Therefore, slightly over 80% of the journals evaluated over these years correspond to journals in Social Sciences and Humanities. After these 8 evaluation processes, 634 Spanish scientific journals currently hold certification, of which 5.06% belong to the field of Life Sciences, 5.75% to Experimental Sciences, 42.33% to Social Sciences, and 46.31% to Humanities. Based on all the above, it is concluded that scientific journals in the fields of Social Sciences and Humanities are widely represented in the Spanish publishing landscape and exhibit high success rates compared to other knowledge areas.

### REFERENCES

Coslado, M. A., Báez, J. M. & Lacunza, I. (2010). Descripción y análisis del proceso de evaluación de la calidad de las revistas científicas españolas llevado a cabo por FECYT en el año 2008. *Revista Española de Documentación Científica*, vol. 33 (3), 481–495. https://doi.org/10.3989/redc.2010.3.738

FECYT (2023). *Metodología de Clasificación de Revistas de Humanidades y Ciencias Sociales con Sello de Calidad FECYT*. Edición 2023. https://doi.org/10.58121/ytvj-pg72

Coslado, M. Ángeles, De Filippo, D., Ros, G., & Sanz-Casado, E. (2023). Análisis de buenas prácticas editoriales en igualdad de género en España. *Revista Española De Documentación Científica*, 46(1), e348. https://doi.org/10.3989/redc.2023.1.1952

### Co-Designing Training on the Responsible Use of Research Metrics for the Irish Research Ecosystem

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### BACKGROUND

Reform of research assessment and evaluation is a necessary step towards embedding open research across the research ecosystem, a point recognised by the Council of the European Union and Ireland's National Framework on the Transition to an Open Research Environment. Transparent practices are integral to an open research environment for the benefit of both research quality and research impact. To mainstream the adoption of open research practices, an evaluation system that appropriately recognises the broad range of outputs beyond publications is required. Currently in Ireland, there is a gap in infrastructure for training the research

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community on the responsible use of research metrics (RURM) for recruitment, research assessment and career progression.

#### AIMS

Our project aims to improve awareness within the Irish research ecosystem of RURM principles through the development of an online training module about RURM for everyone involved in research including researchers at all career stages, technical officers, and research managers / administrators.

#### METHODS

This project uses a co-design process to identify the needs and priorities of the intended audience, preferred delivery method, and mechanisms for effective engagement on this topic. Co-design is via a series of focus groups with members of the research communities at three Irish research performing organisations (Dublin, Munster, Atlantic region). In line with FAIR principles, this project aims to reuse and adapt existing materials related to RURM. Based on co-design input, existing media identified through a scoping review framework will be investigated for reuse or adaptation in the development of the training. Additional required materials will be developed by the project educational technologist in consultation with the multidisciplinary project team. Universal Design for Learning principles will be used throughout to maximise accessibility of materials.

#### **RESULTS AND CONCLUSION**

Ultimately, the project will produce an Open Education Resource for adaptation by research institutions across Ireland, providing a key training and capacity-building resource to support the necessary cultural change, and inform how stakeholders across the research system can embed open research principles as part of all research assessment practices, including:

- (i) transparency of research evaluation criteria, data sources and metrics, and the use of open and clearly defined metrics where possible;
- (ii) recognition of broader outputs / contributions beyond publications (data sharing and software, etc.); and
- (iii)evaluation of research outputs based on their intrinsic merit rather than publication venue, to eliminate potential disadvantage to those who publish through less-established high quality open channels and platforms.

# Institutional Responsible Research Assessment Efforts And The Response From SSH Disciplines – The Case Of Masaryk University

Michal Petr Natálie Hílek Petra Mořkovská Monika Kuchlei Sieberová Research Office, Masaryk University, Czech Republic

Since the San Francisco Declaration on Research Assessment was published, the idea of responsible research assessment (RRA) and its conceptualisation has grown in the academic community. It has been crowned with the Coalition on Advancing Research Assessment (CoARA) and SCOPE framework. RRA recommendations are general in nature, while implementation differs in each country's legislative and historic-cultural context. However, the same central-level values are sometimes hardly ensured at lower levels, i.e., in the organisational components and units. At the same time, we know that reform can only be achieved when change happens everywhere. Implementing these principles within the university is a central theme of our contribution. RRA is a concept, but what is the right balance between top-down implementation of common RRA principles and performing a precise approach to respecting research quality notions in each discipline? Is following the recommendations enough to achieve perceived responsibility in evaluation? Isn't too much diversity in evaluating research quality and environment in different disciplines elusive for the institution's management? Our poster does not offer simple answers. However, we use a case of the first run of the newly designed Masaryk University (MU) institutional evaluation to document the response of SSH disciplines to the evaluation system built on RRA principles. Firstly, we deliver the overview of MU system of evaluative activities and a more detailed specification of the Internal Research and Doctoral Studies Evaluation (IRDE). We describe the policy implications and impacts of the IRDE on SSH faculties and discuss the aspects of assessing the quality of research in SSH and how it fits RRA ideas. For this purpose, we conducted semi-structured interviews with vice-deans of six SSH faculties at Masaryk University. The poster is oriented foremost on practical applications and impact on strategies.

Historically, research evaluation in the Czech Republic has chiefly been based on a publication indicator, which resulted in publication points and their conversion into money. This model was used at many universities and translated into their management. Since 2017, the new national evaluation method combines quantitative and qualitative approaches. The role of this methodology is firstly to monitor R&D

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performance annually and secondly to have research organisations undergo a robust evaluation by evaluation panels over a five-year cycle. Neither the procedures nor the results of the national research evaluation methodology can be easily applied within institutions, as it has a different mission and level of detail. Some universities, therefore, experiment with more or less innovative approaches in their internal research assessment.

In 2022, Masaryk University underwent a first run of the newly designed institutional evaluation system. Evaluation activities at Masaryk University now form a triad of components with three primary purposes, each with its processes and tools: research fundina evaluation (IRDE), (performance indicators), and monitoring (bibliometrics). The logic of this system is that even though these purposes are complementary, we use different tools for different purposes. Research evaluation is separate from funding and is not affected by bibliometrics, which tracks trends and creates profiles for annual system analysis and R&D monitoring. We use a set of performance indicators for funding, but they have only a partial weight in the budget, and we transparently communicate their exclusive role in the system. In doing so, we aim to create an environment where we reduce undesirable research incentives. Research evaluation has a clear objective – to provide robust and valid feedback unencumbered by bibliometric parameters and financial incentives.

IRDE is based on peer review without the influence of bibliometrics and is designed to recognise the diversity of disciplines. Self-evaluation reports are predominantly narrative and differentiated at units and doctoral degree programmes. MU faculties and institutes participated in the design process from the beginning. They had the opportunity to customise self-evaluation reports and include all relevant information adapted to their specific needs. The implementation of the first run was followed by evaluating the evaluation and communicating the outputs. We consulted with the creators of the SCOPE protocol (INORMS Research Evaluation Group), organised a conference dedicated to responsible evaluation (Science for Society), and prepared a summary report that critically evaluated the IRDE. The report includes the results of a questionnaire survey among evaluators and members of the MU academic community and suggestions for future improvements. All these follow-up activities allowed us to monitor different approaches to evaluation procedures, get feedback from various disciplines, and learn a lot, which we want to share in our poster. The response from SSH faculties to this model of the evaluation system is diverse. Some SSH faculties as a consequence transformed their historical structures towards research groups and topics (Sports, Economics). As for methods, regardless of the current trends, some SSH disciplines see bibliometrics as relevant for identifying quality as they consider usual in STEM fields (Social Sciences, Economics); others call for bigger formativity and freedom in expressing the notions of quality (Education, Law). Despite this, a high level of inclusivity may result in gaming with the panel members and a somewhat blurred interpretation of the evaluation results.

In the poster, we discuss the experiences and impacts of the evaluation and the response of SSH disciplines to institutional efforts for responsibility in evaluation and the present system of evaluative activities with different missions. Our contribution is focused on sharing the experiences of the Faculty of Arts, Faculty of Social Sciences, Faculty of Law, Faculty of Business and Administration, Faculty of Education and Faculty of Sports Studies. We will mention a few questions regarding specificities of research evaluation in SSH, e.g., internationalisation, the role of bibliometrics, positive lists of publishers/journals, problems of different organisational structures and differences between old and new (widening) EU countries in the context of institutional research assessment. We argue that talking about responsible evaluation, design and methodology and identifying research quality is strongly bound to knowing why and who we want to evaluate. This affects on the one hand managerial (decision making, research policy, finance) and the other hand academic (feedback, research strategies) aspects and expectations, i.e. where the inclusivity and diversity meet the desired functions of the evaluation.

### Digital OA Monographs In Poland: Challenges Of Evaluation

Marta Świetlik Digital Humanities Centre IBL PAN, Poland

Magdalena Wnuk Digital Humanities Centre IBL PAN, Poland

Monographs – on the contrary to journal publishing – have so far been on the margins of the digital and OA revolution in Poland (and in Europe in general) (Morka and Gatti 2021). Due to the additional costs of preparing professional electronic publication formats (e.g. epub) as well as strong tradition of a printed book as more prestigious (Maryl i in., 2020), polish publishing houses rarely publish scientific monographs in open access and even more reluctantly they turn to such publications formats as born-digital monographs or other innovative outputs. Some of the consequences are that OA humanistic monographs and digital outputs are less visible in databases, reach smaller audiences, even in the respected fields, and have lower impact factors, which sums up to be considered less profitable.

Our poster will present the main results of the two-year project "OPERAS-PL", led by the national node of the OPERAS infrastructure. The project's main goal was to increase the availability and impact of Polish research outputs in the humanities, with a particular focus on monographs. In the research phase, aimed at recognizing challenges, pain points and needs in monograph publishing, we implemented various techniques and methods, such as a survey, interviews and design thinking workshops, which provided in-depth insight into stakeholders' needs, expectations and ways of thinking about solutions. Provided methodology could be reusable in the study and recommendations for publishing houses in different environments.

The poster will contribute to the discussion on evaluation models for the humanities research outputs, particularly monographs. Digital monographs, although they meet the definition of the Polish regulation on the evaluation of the quality of scientific activity, are not considered equivalent to printed scientific monographs. The final stage of the OPERAS-PL project leads to the proposal for new evaluation rules that will take into account the specifics of innovative forms of digital scholarly communication. New evaluation standards for OA monographs and innovative digital outputs (e.g. digital monographs) – developed in cooperation with the scientific community and the other stakeholders (publishers, research institutions, libraries, public administration and researchers) are to be presented to policymakers in order to implement adequate changes in the Polish evaluation system at the national level. With potential changes in evaluation of open science communication, which is

currently one of the most important conditions for effective communication of scientific research results.

# Assessing The Impact Of Humanities And Social Sciences On Technological Frontiers Through Patent Citations

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Research evaluation in Humanities and Social Sciences (HSS) has long been the subject of lively debates within diverse scientific communities. The inherent specificities of these disciplines, their diverse publication practices, and the variety of outputs, ranging from academic articles to books, and including more ephemeral forms such as blogs and reports, pose significant challenges for conventional evaluation systems heavily reliant on quantitative indicators derived from international databases like Web of Science (WoS) or Scopus.

Yet, at the heart of this debate, the assessment of the technological impact of HSS remains largely unexplored. This gap presents an opportunity to deepen our understanding of the unique contributions of these disciplines to technological innovation. This study is dedicated to transcending the constraints of conventional databases by examining the usage of scientific output in HSS within inventive activities. It aims to introduce an alternative dimension that values scientific production in HSS, analyzing its application in inventive endeavors, and thereby providing a fresh perspective on the intersection of HSS with the technological innovation process.

The analysis reveals that HSS have a substantial impact on invention patents, constituting 11.36% of cited publications. An emerging trend is the growing prominence of environmental sciences within HSS cited in patents. Additionally, political sciences play a significant role, shaping technological advancements through international agreements and national policies.

# Creating The Metrics We Wish To See In SSH: Encouraging Wikimedia Impact With Metrics And The Wikimedia Impact

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Wikimedia holds a unique position in the knowledge space, being open, trusted, and actually quite accurate in general. Unfortunately, researchers and scientists rarely engage with Wikimedia, sometimes even banning it from the classroom, despite the fact that they often purport to want to make their knowledge open and accessible to the public. Rather than ban this amazing resource, we encourage academics to accept that Wikipedia is where the public looks for knowledge, and to make it as good as possible. We believe an important aspect in academics not engaging is a lack of professional incentives to do so. Thus, our team is building and creating metrics of contribution and impact that are easily digestible to e.g., academic funders and universities in the form of Wikimedia Impact Metrics (WIMs) and the Wikimedia Impact Tracker (WIT).

# Exploring The Collaboration Networks Of Female Scholars In Digital Humanities Using LinkedIn Data

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Digital humanities (DH) is an interdisciplinary field utilizing digital technologies to explore humanities questions. Its relative consolidation, strong informal networking, and well-developed presence on digital platforms make it an interesting target for bibliometric analysis, despite inherent data biases. This study will assess various data sources, including Linked-In, the DARIAH Knowledge Graph, and the index of DH Conferences, to evaluate their potential to reveal new knowledge about DH. In specific, the paper will focus is on examining ease of access and relevance of the results in the context of female advancement in the field, in particular through their development of networks, professional advancement, brokerage and support roles, co-authorship, and harnessing of infrastructural connections.

Although the work will not present a complete analysis of each of the data sources, it aims to identify research questions applicable to them and present a methodology for assessing their utility. The study will ultimately explore the factors that influence the formation and development of women's professional networks and contribute to understanding the gender dynamics and diversity issues in DH. It will also open up a discussion about data sources 'beyond the obvious' that might be used for the investigation of smaller fields with a strong presence of the humanities.

# Embedding Open Research Practices: Perspectives From An SSH Publisher

Becky Hill Taylor & Francis, United Kingdom

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Over the last decade or so, we have seen increasing adoption among actors across the research system towards more open and collaborative ways of working. This shift towards open research has been driven by a combination of research funder policies and incentives, the opportunity to rapidly share and discover research presented by technology, and greater public demand for access, transparency, and inclusiveness in research. This adoption has been set against a backdrop of significant moves to improve and reform how research is valued and assessed, with a number of influential global initiatives (such as DORA and COARA) that aim to revisit how we evaluate research and researchers – which crucially, include a focus on research practices and governance that are central to open research (e.g. publishing open access, sharing data and resources, making a much broader range of research objects and outputs available).

Open research opportunities have historically aligned better with the working practices of the life sciences, focused on quantitative data sharing, replicability, and the publication of study protocols and methods papers. Equally, there are benefits to openness and transparency in the Social Sciences and Humanities (SSH), but the use case, need and challenges can vary significantly. Routledge and Taylor & Francis, have a heritage and substantial publishing portfolio in SSH and have been experimenting with a diverse range of pathways to enable a transition to open research; specifically for researchers in the Humanities and Social Sciences, with the aim to contribute towards responsible research practices.

Join Becky Hill and Liz Allen (Taylor & Francis), for an overview of how a scholarly publisher is progressing with open research to deliver a sustainable transition for Humanities and Social Sciences research. We'll introduce examples of the ways in which Routledge, Taylor & Francis, and F1000 are adapting their services to introduce open data policies specifically designed for SSH research, enable a breadth of article types to make research in all its forms and formats as discoverable and accessible as possible, facilitate open peer review within specific subject communities, and pilot community-based models to enable open monograph publishing. We will introduce scholarly publishing solutions that have been designed with openness, transparency, and the discoverability of SSH research outputs at their core, as well as providing

credit and visibility for researchers for all the contributions that they make to research.

Publishers can play a key role in making open research practices possible and simple to achieve for SSH researchers, but for meaningful change to happen, those practices need to be a recognized and rewarded part of our research culture and incentivized in research assessment systems. Collaboration among all stakeholders across the research system is essential to deliver the promise of open research. This presentation is intended to present a diversity of models, designed to enable a sustainable shift to open research, to spark discussion, and to create ideas that can help to shape practical and robust responses to the challenges we collectively face.

# DAY 1 SESSION 2 / Research on Research

# Unravelling The Diversity of Scholars in the Humanities: Profiling Humanists Based on Their Publication Patterns

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#### INTRODUCTION

This study builds upon the understanding that scholars in the Humanities have a distinct publication behavior from the rest of fields which challenges the use of bibliometric methods to analyze their performance and dynamics (Franssen & Wouters, 2019). More specifically, we focus on the analysis of publication patterns in these fields. We aim to understand to what extent the longstanding assumption that humanists have a more diversified output in terms of publication types (Nederhof, 2006) holds when considering authors' complete publication record.

Furthermore, we aim at looking into differences within Humanities fields. For this, we focus on a sample of over 50,000 scholars from Spanish-speaking countries within the 1950-2021 period. Our goal is twofold. First, we want to profile humanists by field and overall based on their publication patterns. Second, we aim at exploring potential characteristics related to these profiles. Mainly we will be looking into generational shifts and topic-related factors which may influence publication patterns. We do this using a unique dataset extracted from Dialnet, one of the largest bibliographic portals of scientific literature for the Social Sciences and Humanities in Spanish speaking countries. This database is characterized by, among other things, its manually curated author profiles which allow an individual level approach, going beyond common publication-level analyses on publication patterns.

### MATERIAL AND METHODS

A complete dataset of publications and authors assigned to Humanities fields was provided by Dialnet, a bibliographic database covering around 2,500 journals for Spain and South America in the Social Sciences and Humanities (Arroyo-Machado & Robinson-Garcia, 2024). Also, Dialnet includes books, book chapters and proceeding

papers along with journal articles. Furthermore, as a regional platform, it covers non-English literature. Here we work with a set of 39,753 researchers who started publishing from 1950 onwards distributed across 13 research fields. Figure 1 shows the distribution of publication by type and language.



**Figure 1**. Distribution of (A) type of publications and (B) language of publications by discipline. Data filtered to scholars with publications since 1950 and with more than one publication.

We analyze humanists' publication patterns based on 8 variables which can be grouped in the following way:

- 1. Authored publications, that is, number of journal articles, proceedings papers, book chapters and books.
- 2. Edited publications, that is, books and conference proceedings.
- 3. Outreach of the output, that is, share of publications indexed in Web of Science or Scopus (referred to as mainstream publications), and share of non-English publications (referred to as local publications).

We then apply an archetypal analysis to our complete dataset as well as by discipline. Archetypal analysis (Eugster & Leisch, 2011) is a method which identifies archetypes or extreme profiles from a given dataset. Unlike clustering methods, it does not assign cases to each archetype, but indicates the distance ( $\alpha$  score) between cases and each archetype.

#### PRELIMINARY FINDINGS

Figure 2 reveals four distinct researcher profiles, each with unique publication patterns. Most researchers align with archetypes 1 (34.1%) and 3 (57.1%), representing highly productive segments of academia, while archetypes two (1.5%) and four (7.3%) are less prevalent. Archetype 1 predominantly consists of seasoned researchers who primarily author books and local publications. Archetype two represents early-career scholars, notably from Language & Linguistics and Philology, who contribute mainly

to local conference proceedings and display a broad distribution across productivity percentiles.

Archetype 3 is the most representative of the Humanities, denoting researchers with a strong inclination towards publishing papers in local venues. This archetype cuts across all disciplines, especially Music, Philosophy, and Anthropology. 55% of its academics have less than 12 years' experience in the field. These researchers are also highly productive. In contrast, archetype 4 is composed of those publishing papers in mainstream journals. While not as widespread, disciplines like Paleontology and



**Figure 2**. Archetypal analysis of Spanish Humanists: (A) Publication patterns and preferences of each archetype; (B) Detailed features of each archetype, including the  $\alpha$  score for all humanists, highlighting those closest to the specific archetype, along with the average age and productivity percentile for humanists within that archetype.

Translation Studies feature prominently in this group, which exhibits a relatively young academic age and medium to high productivity levels.

### DISCUSSION AND FURTHER STEPS

This study examines the publication patterns of over 50,000 humanists from Spanish-speaking countries. Archetypal analysis was used to categorize these scholars into distinct profiles, each representing a unique approach to academic publishing. The analysis highlights a significant trend towards local and regional publication avenues, challenging the prevailing view that global, English-language journals are the primary or most prestigious outlets for scholarly dissemination. This preference for regional platforms and non-English publications in the Humanities suggests that these venues are not just alternatives but essential components of scholarly communication in these fields.

The findings indicate a dynamic landscape in humanities publishing, with varying approaches observed among scholars at different career stages. Established researchers tend to favour traditional forms of publication, such as books and book chapters, which have long been fundamental in humanities scholarship. In contrast, emerging scholars, particularly in rapidly evolving disciplines, are inclined towards more diverse and, in some cases, mainstream publication formats. This shift may signify a generational change in publishing strategies, reflecting a balance between traditional scholarly values and the demands of a global academic audience. These divergent patterns underscore the complexity of evaluating humanities research, challenging the suitability of standard bibliometric methods, which often favor articles in high-impact, English-language journals, and overlook the richness and diversity of humanities scholarship.

The investigation into these patterns is currently in progress. The focus is on exploring generational differences, delving into specific research topics within the Humanities, and assessing the statistical significance of these variations, taking into account factors such as publication type and language. This ongoing research is instrumental in identifying the most influential factors shaping publication patterns in the Humanities. As these are preliminary results, the study continues to evolve, with the aim of further deepening our understanding of this dynamic and multifaceted field.

### REFERENCES

Arroyo-Machado, W., & Robinson-Garcia, N. (2023). Towards a Science of Humanities: How Big Data can Solve the Limitations of Scientometrics. In A. Gallego Cuiñas & D. Torres-Salinas (Eds.), *Humanities and Big Data in Ibero-America* (pp. 75– 92). De Gruyter. <u>https://doi.org/10.1515/9783110753523-006</u>

Eugster, M. J. A., & Leisch, F. (2011). Weighted and robust archetypal analysis. *Computational Statistics & Data Analysis*, 55(3), 1215–1225. <u>https://doi.org/10.1016/j.csda.2010.10.017</u> Franssen, T., & Wouters, P. (2019). Science and its significant other: Representing the humanities in bibliometric scholarship. *Journal of the Association for Information Science and Technology*, 70(10), 1124–1137. <u>https://doi.org/10.1002/asi.24206</u>

Nederhof, A. J. (2006). Bibliometric monitoring of research performance in the Social Sciences and the Humanities: A Review. *Scientometrics*, 66(1), 81–100. <u>https://doi.org/10.1007/s11192-006-0007-2</u>

# The Berlin Science Survey. Mapping The Differences in Research Cultures Between Social Science, Humanities, and Other Subject Groups

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The Berlin Science Survey is a trend study to monitoring the transformation of research culture(s) in the Berlin research area. It is designed to evaluate how higher education policy measures within the framework of the Excellence Strategy affect research cultures. However, it does not focus on individual measures, but looks at the effects on research cultures as a whole. A particular focus of the project is on unintended effects of science policy management, especially when comparing disciplines. The pilot study conducted in 2022 among 1,098 scientists from all disciplines has already provided interesting comparative insights into the attitudes and practices of scientists with regard to the topics open science, knowledge transfer and cooperation. The second wave is currently underway, which will provide additional insights into working cultures and research quality.

The empirical paper compares the social sciences and humanities with other subject groups with regard to various facets of research cultures. We are investigating attitudes, motives and practices in the areas of open science, knowledge transfer and research cooperation. On the one hand, the empirical results illustrate the well-known cleavage between the two cultures, but differentiate this further. In particular, the intermediate role of the social sciences (quasi as a third culture) between the sciences and the humanities becomes apparent. In addition, depending on the subject area, further significant lines of differentiation become visible within the sciences between the life sciences, natural sciences and engineering sciences, which should be relevant for research evaluation and university policy management.

Against the background of the empirical results, we argue that, beyond the old division between SSH and science, various research contexts should be considered in more detail and taken into account more adequately in research evaluation.

# Internationalisation of Chinese Humanities and Social Sciences: Contextual Agency and In-between Dilemmas

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#### RESEARCH CONTEXT

The landscape of global research is evolving, with China's rising prominence challenging the established Anglo-European dominance. However, the remarkable growth in science and engineering contrasts with the humanities and social sciences (HSS), where Chinese research, despite gaining some visibility, remains less pronounced internationally.

This is against a backdrop of the complexities in Chinese HSS research, which has been influenced by an array of factors including imperial governance, Sinic tradition, Marxism-Leninism, and the impacts of Western cultures through globalisation. Unlike the sciences, HSS research in China is deeply entrenched in cultural and ideological contexts, making its internationalisation a more nuanced challenge. This challenge stems from the need to navigate between endogenous knowledge, national agendas, political correctness, and Western academic norms. This presentation will delve into the challenges, dilemmas, and opportunities in Chinese HSS.

### CONCEPTUAL LENSES

This paper synthesises Chinese and English scholarship to explore the conceptual lenses of 'contextual agency' and 'glonacal' (global-national-local) agency heuristics. It argues that agency should be understood as contextual, where agents and structures coexist within the same entity, embracing a 'tian ren he yi' approach. It then develops the 'glonacal' agency heuristic, which emphasises agency as contextual but not fully contextualised, moving beyond traditional organisational theory models. This perspective views universities not just as strategic actors within multilayered spaces but also as entities capable of exercising agency across global, national, and local scales, with the potential for interchangeable roles between agent and context.

The conceptual framework thus calls for a nuanced understanding of the dynamics of internationalising Chinese humanities and social sciences, recognising the multifaceted interplay between global influences, national policies, institutional expectations, and individual academic endeavours. It highlights the importance of acknowledging and engaging with diverse epistemologies and the value of pluralised knowledge, advocating for epistemic justice and the enrichment of the global

academic community through a more inclusive and comprehensive understanding of contextual agency.

### METHODOLOGY

The paper draws on findings from a study with a mixed-methods approach, including the analysis of 75 interviews with academics, university administrators, and journal editors, alongside 172 university policy documents and a comprehensive corpus of national policy documents spanning from the 1960s to 2020.

### FINDINGS AND DISCUSSIONS

The findings reveal a multifaceted picture of Chinese HSS's internationalisation at the global, national, institutional and individual scales. On the global scale, the international collaboration in humanities and social sciences (HSS) is less prevalent compared to the sciences, attributed to single-author publishing habits and numerous challenges including linguistic, cultural, and epistemological barriers. Western ideologies and cultures, diffused globally, perpetuate a form of cultural (neo)colonisation, where English remains the dominant academic language, presenting significant hurdles for non-Anglophone research and researchers, particularly from China. On the national scale, Chinese HSS research is deeply rooted in both traditional Chinese philosophies and modern Western influences. Despite efforts towards endogenisation and respecting Chinese epistemic traditions, Western ideologies have significantly shaped the institutionalisation of HSS in China. Government policies oscillate between promoting international visibility ('going out') and reinforcing endogenisation ('Chinalisation'), reflecting a complex interplay of embracing global standards while striving to maintain a distinctly Chinese scholarly identity.

On the institutional scale, universities in China are influenced by global narratives and national policies, and demonstrate varying degrees of autonomy in their approach to internationalising HSS. While aligning with global standards and national agendas, some institutions and departments actively seek to balance international exposure with maintaining the integrity of indigenous knowledge, demonstrating a nuanced engagement with global and national imperatives. On the individual scale, academics and researchers operate at the confluence of global, national, and institutional directives, exercising agency within this multifaceted context. While there is a general alignment with national priorities and the pursuit of international engagement, there is also a discernible effort to resist the homogenisation of scholarship and to preserve the uniqueness of Chinese HSS research. This includes balancing the push for international publications with contributing to local and national discourses, and challenging the dominance of Anglo-European perspectives in global academia.

To conclude, the internationalisation of Chinese HSS is a dynamic process influenced by a constellation of factors at the global, national, institutional, and individual levels. The concept of 'in-betweenness' emerges from this paper as a useful framework for understanding the oscillations between internationalisation and endogenisation, global engagement and national identity, and epistemological openness and ideological vigilance. This 'in-between' space is characterised by possibilities for hybridity and innovation, reflecting a dynamic and evolving landscape of Chinese HSS in the global academic community. This nuanced understanding challenges binary perceptions of global academic practices and underscores the importance of pluralised knowledge and epistemic diversity in the global scholarly community.

# A Comparative Analysis of The Evolution Of Co-Authorship Practices In Social Sciences and Humanities in Four European Countries

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This study compares the evolution of co-authorship practices in journal articles in the social sciences and humanities (SSH) over more than a decade in four European countries: Finland, Flanders (Belgium), Norway, and Poland. National databases with complete records of scholarly publications are applied because they more comprehensively cover the two areas of research and local research publications than is found in the international citation databases such as Scopus and Web of Science.

SSH publications are traditionally single-authored or have few co-authors because they more often aim at interpretation rather than explanation and focus on theoretical and qualitative problems. Based on earlier observations, our hypothesis is that the use of co-authorship is increasing, but the trends may differ among countries, and that such differences may partly depend on funding and assessment systems with differing counting methods, e.g., full, fractional, or modified fractional counting of coauthored publications (Sivertsen et al., 2019). We aim to explore the trends and their possible differences and explanations in this comparative study.

We will be aware that other factors than policies may influence the trends in coauthorship practices. The technological development enabling more intense international science communication and publishing, the emergence of new methodologies and sub-disciplines in the SSH such as Digital Humanities, as well as the growing emphasis on interdisciplinary research, may also influence a shift towards increased co-authorship in the SSH.

Trends in co-authorship practices in the SSH have been studied previously. At a global level through publications indexed in Web of Science's Social Science Citation Index (SSCI), Henriksen (2016) noted that, in the social sciences, the average number of authors per publication was increasing, but with large disciplinary differences. The highest number of authors were observed publications based on the use of experiments, large data sets, statistical methods and/or team-production models. Pölönen et al. (2017) found that co- authorship patterns in the SSH differed at country level between Finland and Flanders but could not attribute these differences to national funding schemes. In a recent regional study of Flanders, Arhiliuc & Guns (2023) show that the share of co-authored publications in both social sciences and humanities journals has increased during the years 2000–2019, but the trend seems to reach a plateau during the last years, possibly due to an adaptation to the aforementioned factors.

The present study will fulfil a preliminary study presented at the Nordic Bibliometric Workshop 2023 by Engels et al. (2023) which used data from the Flemish VABB-SHW (years 2000–2021, i.e. 22 years) and the Polish PBN (years 2013–2021, i.e. 9 years). Here we add data from the Norwegian Cristin database (years 2011–2021, i.e. 11 years) and from the Finnish VIRTA database (years 2011–2021, i.e. 11 years). The data is standardized for analysis, aligning the local discipline classification to a modified version of OECD FOS (field of science) that expands Humanities disciplines. Only journal articles are included to ensure minimal ambiguity in attribution of publications to disciplines. The FOS classification of journals will be consistently applied across the four countries, meaning that all journals with articles from two or more of the countries will be given the same classification.

For the number of authors per publication as the dependent variable, we will apply a Collaborative Index (CI), which calculates the average number of authors, as well as the Revised Collaborative Coefficient (RCC), which normalizes the CI to diminish the impact of outliers.

The main independent variables are the country, the discipline, the publication year, and the language of the publication. The language variable will be needed to test the assumption that the publications in English are more collaborative potentially due to international collaboration, while the local ones maintain a larger proportion of publication with one author or a few authors. The country affiliation of co-authors is thereby also an important variable (while the national database determines the primary affiliation of a publication). The disciplines will be studied individually as well as aggregated to the two main areas of the social sciences and humanities. Our local knowledge of national level traditions, policies and funding and assessment regimes in each of the four countries will provide important contextual information. Our previous study (Engels et al., 2023), comparing co-authorship trends between Poland and Flanders, noted significant differences in the frequency of co-authored publications. Flanders shows a higher average number of authors per publication, a higher RCC value, and larger share of collaborative articles. However, the evolution of both average author count and RCC indicate a surge of co-authorship in Poland, contrasting with Flanders' more gradual increase. We aim to contextualize these results in broader context of co-authorship trends in Norway and Finland and conduct similar analysis for these countries to facilitate the discussion about how variations in research policies and national research context have potentially influenced the trends.

To conclude, our goal is to build on our prior work by incorporating additional countries for more comprehensive analysis. At the conference, we will seek to encourage wider participation from nations with detailed SSH publication records to facilitate a broader examination of co-authorship patterns globally.

### REFERENCES

Arhiliuc, C., & Guns, R. (2023). Disciplinary collaboration rates in the social sciences and humanities: What is the influence of classification type? Scientometrics, 128(6), 3419–3436. <u>https://doi.org/10.1007/s11192-023-04719-0</u>

Engels, T., Arhiliuc, C., Kulczycki, E., & Maziarczyk, A. (2023, October 15). NWB2023\_A cross national comparison of evolution of co-authorship practices in Social Sciences and Humanities [Presentation]. figshare. https://doi.org/10.6084/m9.figshare.24312544.v1

Henriksen, D. (2016). The rise in co-authorship in the social sciences (1980–2013). Scientometrics, 107(2), 455–476. <u>https://doi.org/10.1007/s11192-016-1849-x</u>

Sivertsen, G., Rousseau, R., Zhang, L. (2019). Measuring Scientific Production with Modified Fractional Counting. Journal of Informetrics, 13(2): 679-694.

# DAY 1 SESSION 3.1 / Open Research


Assessing Awareness, Engagement, and Training Needs in Open Research Practices: A Study of Irish Researchers in Social Sciences Across Quantitative and Qualitative Methods

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#### BACKGROUND

In recent years, Open Research has emerged as a prominent concern and gold standard across various disciplines (Hardwicke et al., 2021), spurred by the failure to successfully replicate studies across numerous academic disciplines (Tincani & Travers, 2019). Such failures have prompted efforts to evaluate replicability across diverse fields, ranging from economics (Camerer et al., 2016) to biology (Errington et al., 2021), resulting in considerable variations in successful replication rates (30%-90%). Consequently, researchers have recognised the imperative to adopt responsible research practices to ensure transparency, rigor, and reproducibility of findings (Gopalakrishna et al., 2021). Large-scale nationwide surveys have been undertaken to gauge engagement with Open Research Practices (ORPs). In the Netherlands, Gopalakrishna and colleagues (2021) conducted a survey of researchers, revealing substantial differences in engagement across various practices and disciplines. Similarly, in the UK, Norris and colleagues (2022) identified a gap between awareness of specific practices and their actual implementation. To date, no study has comprehensively assessed the levels of engagement with ORPs among Irish researchers.

To address this gap, our study introduces a preregistered survey evaluating ORPs across a spectrum of disciplines, ranging from the hard sciences to social sciences, including both qualitative and quantitative research methodologies. Incorporating practices throughout the research life cycle, from study pre-registration, and open materials to preprints, and open access publications, the survey aimed to gather insights from researchers across Ireland. Furthermore, we aimed to gain an understanding of Irish researchers' experiences with open research, and their perceived training needs.

The survey is part of a larger project and will inform the development of a tailored open research training programme, acknowledging differences in experiences, needs, and perspectives across diverse disciplines and research methodologies. This inclusive approach ensures a nuanced understanding of ORP awareness and engagement, with specific attention to identifying training disparities among individuals who engage in different research methodologies. Here, we present preliminary findings for Irish researchers in the social sciences, capturing researcher awareness of specific open research practices, level of engagement in those practices, the impact of preferred methodology (qualitative vs quantitative), and the extent to which researchers perceive barriers to entry.

#### METHOD

We collected data from 307 participants from 16 research institutions in Ireland, which includes a total of 97 researchers from the social sciences. The survey probed the awareness and adoption of various practices by individual researchers. The study also explored the associations between researchers; practices, their field of study, their primary methodologies (quantitative, qualitative, or mixed methods), their self-reported capability, opportunities, and motivations regarding engagement in ORPs. Finally, we also gathered data on people's training experiences, and desires for ORP training. The full list of survey questions can be found here (https://osf.io/chxgd/), on the project's webpage. The survey received ethical clearance from Maynooth University.

#### RESULTS

Preliminary findings emphasise a general interest in open research across all fields of social sciences. Despite reported constraints such as limited time (67% considered time to be an issue), lack of financial support (87% reported a lack of financial support), poor incentives from institutions (75% reported a lack of incentives), and minimal recognition (86% reported a lack of recognition), researchers in social sciences generally express intentions to apply ORPs to their research.

Awareness of open research practices ranged from 98% (Open Access) to 44% (Registered Reports), while level of engagement ranged from 77% (Open Access) to 17% (Registered Reports). However, there were disparities depending on whether researchers generally used quantitative or qualitative methodologies. Figure 1 highlights a significant gap between the awareness and actual implementation of ORPs among Irish researchers, evident across both quantitative and qualitative research methodologies. Interestingly, this gap is more substantial for qualitative research methodologies (46%) compared to quantitative ones (20%) in social sciences.

Overall, quantitative researchers exhibit higher awareness of ORPs (86%) and display a smaller awareness-engagement gap (20%) compared to their qualitative counterparts. Qualitative researchers demonstrate lower awareness of certain ORPs (76%); however, they also tend to show a greater awareness-engagement gap (46%). Why is engagement lagging so far behind awareness? One possible explanation is that engagement efforts may not have been accompanied by targeted training or support specifically tailored for researchers from social sciences, and especially in qualitative methods. Social science research often involves unique challenges and nuances that may require specialised guidance for effective implementation of open practices (e.g., how best to share sensitive or personal data?).

Consequently, researchers can feel such practices are not applicable to their research. This discrepancy highlights a crucial need for targeted training initiatives, and adequate research support, to bridge the gap between awareness, perceived applicability, and actual adoption of ORPs in these fields. This observation is supported by a majority reporting a lack of training in ORPs (63%) despite overwhelmingly expressing a willingness to participate in such training (85%). This suggests that these practices are not commonly integrated into researcher training for social science in Ireland.



**Figure 1.** ORP awareness-engagement gap (in %) among Irish researchers in Quantitative vs. Qualitative Methods in Social Sciences.

#### CONCLUSION

The current research aims to identify training needs among Irish researchers in social sciences. Preliminary results reveal researchers' willingness to engage in open research, but significant disparities exist between awareness and engagement,

accompanied by a general lack of suitable training. Recognising these nuances is crucial for tailoring interventions and support structures, ensuring the programme addresses unique challenges. The insights gained from our survey will guide our programme's ethos, and inform others developing training content for researchers across fields.

#### REFERENCES

Camerer, C. F., Dreber, A., Forsell, E., Ho, T. H., Huber, J., Johannesson, M., ... & Wu, H. (2016). Evaluating replicability of laboratory experiments in economics. Science, 351, 1433–1436.

Errington, T. M., Mathur, M., Soderberg, C. K., Denis, A., Perfito, N., Iorns, E., & Nosek, B. A. (2021). Investigating the replicability of preclinical cancer biology. Elife, 10, e71601.

Gopalakrishna, G., Wicherts, J. M., Vink, G., Stoop, I., van den Akker, O. R., Ter Riet, G., & Bouter, L. M. (2022). Prevalence of responsible research practices among academics in The Netherlands. F1000Research, 11.

Hardwicke, T. E., Bohn, M., MacDonald, K., Hembacher, E., Nuijten, M. B., Peloquin, B. N., Yoon, E.J., & Frank, M. C. (2021). Analytic reproducibility in articles receiving open data badges at the journal Psychological Science: An observational study. Royal Society Open Science, 8, 201494.

Norris, E., Prescott, A., Noone, C., Green, J. A., Reynolds, J., Grant, S. P., & Toomey, E. (2022). Establishing open science research priorities in health psychology: a research prioritisation Delphi exercise. Psychology & Health, 1-25.

Tincani, M., & Travers, J. (2019). Replication research, publication bias, and applied behavior analysis. Perspectives on Behavior Science, 42, 59-75.

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# Open Science Practices in the SSH in Switzerland: Towards a Conceptualisation of Open Science that is Open to Disciplinary Diversity

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Open Science has become an important concept driving science policy. National and international strategies on different aspects of Open Science are published, with Open Access as the most discussed aspect and Plan S as a prominent example for such an international strategy. With the emergence of the "reproducibility crisis" in several disciplines (e.g., Baker, 2016; Breznau et al., 2022), Open Research Data and Reproducibility have come into closer focus more recently.

However, Open Science concepts and practices differ widely across disciplines. While the discourse on the concepts focuses on a few specific disciplines (Watchorn, 2022), current analyses on practices do nevertheless cross disciplines. Yet, if the concepts are defined in a way that do not correspond to the epistemological characteristics of a discipline, such results can be misleading, especially as there can be numerous obstacles for making data publicly available that depend on a discipline's characteristic (for an overview, see Beno et al., 2017). For example, often it is reported that the social sciences and humanities lag behind open data and open science in general (e.g., von der Heyde, 2019). While this might be the case for some SSH disciplines, for others it might sound cynical if open data movement or practices are said to have "emerged after the launch of the US Open Data portal in 2009" (Beno et al., 2017). Indeed, in the social sciences sharing data openly does have a long tradition with the first international archives emerging in the 1960ies, and international survey programmes producing open or FAIR data that are relevant to the social sciences since the 1980ies (e.g., Scheuch, 2003). However, not all scholarship can rely on publishing data freely due to copyright or data protection regulations. For example, in the community of qualitative researchers have discussed open data as early as 1994 but are held back by the specificities of their methods and ethical requirements (Moore, 2007).

Depending on how one defines "open", the humanities have also a long tradition of making data and publications openly available in museums and libraries. But such approaches of making copyrighted material accessible to the public are currently not

considered open access practices. Ironically, icons of museums or libraries are widely used to represent open data or open access.

These disciplinary or even subject-specific characteristics leading to a diversity in the concepts of and possibilities in open science practices need to be better understood if open science practices are discussed to be included in research or even career evaluations (e.g., O'Carroll et al., 2017). In order to provide the necessary evidence in the Swiss research eco system we therefore developed a survey on open science practices and their relation to research evaluation and fielded it among a random sample of researchers across all disciplines at Swiss universities and universities of applied sciences. We aim at better understanding how wide-spread open science practices are, how they are understood and how they seem to influence research evaluation in the perception of Swiss researchers.

#### METHODS

We fielded a survey among researchers across all disciplines employed at unviersities and universities of applied sciences in Switzerland. As there is no register for researchers, we first collected in desk research all institutes listed at homepages of Swiss universities and universities of applied sciences. We then attributed them to five main disciplinary groups (according to the CERIF classification): humanities, social sciences, economy and law, natural sciences and mathematics, biomedical sciences, technological sciences. We listed interdisciplinary centers and institutes separately. We then randomly selected one institute in each disciplinary group per institution and a reserve sample of one institute in each disciplinary group as well as two interdisciplinary centers per institution. We then collected the names and mail addresses of the researchers affiliated with the selected institutes on the respective homepages. If there were less than X members, we added the researchers of the second institute from the reserve sample.

We developed a questionnaire containing several questions on the researchers' background, their identification, questions on evaluation, research ethics, their practices in open access publishing, engagement in open research data and attitudes towards reproducibility as well as their evaluation of the current practices in their discipline. The respondents could also give their definitions of open science.

We pretested the survey among a diverse group of scholars, i.e., academics from universities as well as from universities of applied science, from STEM as well as SSH in order to be sure that the formulations were adequate for as many different situations as possible. The survey was fielded between January and mid-February, to cover as many different situations as possible reaching out to a maximum of scholars: the first weeks were during general vacations, followed by inter-semester period (for some exam periods) until the beginning of the new lecture period.

#### PLANNED ANALYSIS

Currently, the survey is still in the field, thus we can only preview potential results. We will have ample data to not only investigate different definitions of open science but also look into how SSH scholars see the status of open science practices in their field and compare this to STEM scholars. We will also present data on their perceptions of policy conflicts linked to open science practices, such as data protection, copyright or funding issues. Finally, we will assess experiences with and attitudes regarding the interlink between research evaluation and open science practices.

#### PRELIMINARY RESULTS

We use a few variables for our fieldwork monitoring to avoid response bias. Investigating these variables, we can already see that participants spread well over a variety of fields in the SSH as well as STEM fields and include scholars from different positions at universities as well as universities of applied sciences, thus covering a large diversity in scholarship. We also see that open science is a topic of concern to respondents that comes with several policy conflicts.

#### REFERENCES

Baker, M. (2016). 1,500 scientists lift the lid on reproducibility. Nature, 533(7604), 452–454. <u>https://doi.org/10.1038/533452a</u>

Beno, M., Figl, K., Umbrich, J. & Polleres, A. (2017). Perception of Key Barriers in Using and Publishing Open Data. JeDEM – eJournal of eDemocracy and Open Government, 9(2), 134–165. <u>https://doi.org/10.29379/jedem.v9i2.465</u>

Breznau, N., et al. (2022). Observing many researchers using the same data and hypothesis reveals a hidden universe of uncertainty. Proceedings of the National Academy of Sciences, 119(44), e2203150119. https://doi.org/10.1073/pnas.2203150119

Heyde, M. von der. (2019). Open Research Data: Landscape and cost analysis of data repositories currently used by the Swiss research community, and requirements for the future. Zenodo. <u>https://doi.org/10.5281/zenodo.2643495</u>

Moore N. (2007). (Re)Using Qualitative Data? Sociological Research Online, 12(3), 1– 13. doi: 10.5153/sro.1496

O'Carroll, C., Rentier, B., Valdes, C. C., Esposito, F., Kaunismaa, E., Maas, K., Metcalfe, J., McAllister, D. & Vandevelde, K. (2017). Evaluation of research careers fully acknowledging Open Science practices. Rewards, incentives and/or recognition for researchers practicing Open Science. (Brussels; Publications Office of the European Union). Publications Office of the European Union. https://op.europa.eu/en/publication-detail//publication/47a3a330-c9cb-11e7-8e69-01aa75ed71a1

Scheuch, E. K. (2003). History and visions in the development of data services for the social sciences. International Social Science Journal, 55(177), 385–99. doi: 10.1111/j.1468-2451.2003.05503004.x

Watchron, D. (2022, 21. April). What does Open Science mean for disciplines where pen and paper are still the main working methods? LSE Blog. <u>https://blogs.lse.ac.uk/impactofsocialsciences/2022/04/21/what-does-open-science-mean-for-disciplines-where-pen-and-paper-are-still-the-main-working-methods/</u>

# Does Open Science Reach Policy More than Non-Open Science? Evidence From the Overton Database and its Coverage Across Databases

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#### INTRODUCTION

Altmetrics is a bibliometric approach for studying science and its connections with society and non-scholarly audiences (Pallari et al., 2021). It includes the number of social media interactions, and citations in policy documents, news, Mendeley, etc. Among Altmetrics, citations in policy documents are considered an effective way to analyze the relationship between science and policy (Bornmann, Haunschild, & Marx., 2016).

Studies around policy citations provide evidence relevant to social impact analysis and research evaluation. Kryl et al. investigated the feasibility of using research papers cited in clinical guidelines to track the impact of particular funding streams or sources. Their results show citations in clinical guidelines could potentially be used to help further our understanding on the impact of research on healthy policy and practice (Kryl et al., 2012). Citations in public policy documents have been one of the decision–making indicators for social impact measurements of Applied Prevention Research Centres (APRCs) (Willis et al., 2017). Vilkins and Grant (2017) noted that in addition to interview and survey data, citation analysis of policy documents can be used in research utilization.

Policymaking is an evidence-based process, and scientific paper is one of the formats of evidence. Open Science (OS) has made accessing scientific papers more convenient than ever before. As a proxy for OS, Open Access (OA) allows for the free use of scientific publications by the public and increases the visibility of research. A study by Cole et al. interviewed 18 researchers working at the science-policy interface in the Europe Union and investigated to what extent Open Research played a role in the integration of science into policymaking

The findings indicated that OA publications were not very helpful, given the inaccessibility of much scientific writing (Cole et al., 2023). Recently, however, another study analyzed the scientific activity related to OS in Spain and its influence on public policy from a bibliometric perspective, pointing out that publications cited in policy documents displayed high proportions of international collaboration, open access, and publication in first-quartile journals (De Filippo & Sastrón-Toledo, 2023).

In 2019 Overton was launched as the largest policy document database in the world. It opens the opportunity for large-scale analyses of policy document citations of scientific papers (Szomszor & Adie, 2022). Previous studies based on Overton have focused on questions around the coverage of scientific papers cited in policy documents (Fang et al., 2020; Maleki and Holmberg, 2022), the distribution of scientific papers cited in policy documents across countries and journals (Pinheiro, Vignola-Gagné, & Campbel, 2021; De Filippo & Sastrón- Toledo, 2023), the comparison with Altmetric.com across policy sources(Maleki and Holmberg, 2022; Murat et al., 2023), or how research relates to policy on urgent issues like climate change (Bornmann et al., 2022). However, so far, it is unclear to which degree OA publications are cited in policy documents. This paper provided a large-scale quantitative snapshot of evidence gathered from Overton and four bibliometric databases (Dimensions, OpenAlex, Scopus, Web of Science).

#### RESEARCH QUESTIONS

- (1) How do we cover as much as possible the research that is referred to in policy documents?
- (2) Do OA publications reach policy more than non-OA?

#### DATA AND METHODOLOGIES

All the data was collected from the CWTS SQL in-house database. We used the version of May 2023 of Overton available in the SQL server, there are 4,982,298 publications with Digital Object Identifier (DOI) referred to in policy documents. In addition, we used four bibliometric databases (Dimensions, OpenAlex, Scopus, Web of Science) in the SQL server. To answer RQ (1), DOI is used as the identifier of publications to match across databases, then we got detail of the publications with policy citation from bibliometric databases. To answer RQ (2), we compared coverage of OA and non-OA publications with policy citation across databases.

#### PRELIMINARY RESULTS

The findings presented in Table 1 compare the matching results of Overton and bibliometric databases. Notably, OpenAlex and Dimensions show two to three times more publications with DOI than Scopus and Web of Science. Scopus and Web of Science have a higher coverage rate for DOI referred to in Overton (6.3% and 6.2%), while Dimensions and OpenAlex have a lower coverage rate in this regard (3.6% and 3.1%). However, when it comes to the coverage of DOIs. In Overton publications, Dimensions and OpenAlex take the lead. Specifically, Dimensions has covered 92% of the publications referred to in policy documents in Overton, while OpenAlex has the highest coverage rate of 94.8%.

Bibliometric	Version	Number of	Number of	Coverage	Coverage	Percentage	Percentage	
database		publication	DOI	of DOI	of DOI in	of OA	of non-OA	
		with DOI	referred to	referred to	Overton	publication	publication	
			in Overton	in Overton		in Overton	in Overton	
Dimensions	July 2023	128,917,393	4,585,698	3.6%	92.0%	33.8%	58.3%	
OpenAlex	November	152 247 267	1 721 800	3.1%				
	2023	152,247,507	4,721,099		94.8%	37.4%	57.4%	
Scopus	April 2023	52,142,628	3,279,580	6.3%	65.8%	26.5%	39.2%	
Web of	September	57,672,454	3,555,257	6.20/				
Science	2023			0.270	71.4%	26.6%	44.8%	

Table 1 Coverage of DOI referred to in Overton across bibliometric databases.

To answer RQ (2), we calculated the OA status in these databases, the overall distribution can be found in Table 2 in the appendix. There are two interesting. findings based on the results we have. First, as shown in Figure 1, among publications with policy citations in these bibliometric databases, non-OA publications are more than OA publications.



Figure 1 Distribution of publications cited in Overton indexed in database.



Figure 2 Distribution of OA and non-OA publication in database

Second, as shown in Figure 2, In the case of distribution of OA/non-OA publication in these bibliometric databases, obviously the non-OA publication is the major component. Moreover, the percentage of OA publications with policy citations in OA publications is higher than non-OA publications with policy citations in non-OA publications. It means OA publications have more possibility to be cited in policy documents.

#### CONCLUSION

Overall, in this paper, we matched publications with policy citations from Overton with bibliometric databases, to see their OA status and distribution. Non-OA publications are more than OA publications in all four databases. That also applies to publications with policy citations. In Overton, however, no matter match with which bibliometric database, the percentage of OA publications cited in policy documents is higher than non-OA publications, which is saying OS has a higher probability of reaching policy than non-OS.

#### RECENTLY STARTED WORK

How do policymakers decide to cite a certain publication? If Open Access is one of the factors that impact on policymaking process? To answer these questions, we need more perspective from the policymaker side. We are designing qualitative research and plan to interview scientific advisors from certain countries, to learn about the policymaking process, and how policy makers find and choose the publications they need in their work. This research can help us to understand and propose better ways for scientists and research organizations to reach policymakers, as well as support policymakers and policy science advisors to develop better strategies to use scientific literature. My presentation at the RESSH 2024 conference will provide more details on our recent work.

#### REFERENCES

Bornmann, L., Haunschild, R., & Marx, W. (2016). Policy documents as sources for measuring societal impact: How often is climate change research mentioned in policy related documents? *Scientometrics*, *109*(3), 1477–1495. https://doi.org/10.1007/s11192-016-2115-y

Bornmann, L., Haunschild, R., & Adams, J. (2019). Do altmetrics assess societal impact in a comparable way to case studies? An empirical test of the convergent validity of altmetrics based on data from the UK research excellence framework (REF). *Journal of Informetrics*, *13*(1), 325–340. <u>https://doi.org/10.1016/j.joi.2019.01.008</u>

Bornmann, L., Haunschild, R., Boyack, K., Marx, W., & Minx, J. C. (2022). How relevant is climate change research for climate change policy? An empirical analysis based on Overton data. *PLOS ONE*, *17*(9), e0274693. https://doi.org/10.1371/journal.pone.0274693

Cole, N. L., Reichmann, S., & Ross-Hellauer, T. (2023). The potential of inclusive and collaborative Open Research processes at the science-policy interface [Preprint]. *SocArXiv*. <u>https://doi.org/10.31235/osf.io/qzmf6</u>

De Filippo, D., & Sastrón-Toledo, P. (2023). Influence of research on open science in the public policy sphere. *Scientometrics, 128*(3), 1995–2017. https://doi.org/10.1007/s11192-023-04645-1

Fang, Z., Dudek, J., Noyons, E., & Costas, R. (2020). Science cited in policy documents: Evidence from the Overton database. In *Altmetrics conference*.

Kryl, D., Allen, L., Dolby, K., Sherbon, B., & Viney, I. (2012). Tracking the impact of research on policy and practice: Investigating the feasibility of using citations in clinical guidelines for research evaluation. *BMJ Open*, *2*(2), e000897. https://doi.org/10.1136/bmjopen-2012-000897

Maleki, A., & Holmberg, K. (2022). Comparing coverage of policy citations to scientific publications in Overton and Altmetric.com: Case study of Finnish research organizations in Social Science. *Informaatiotutkimus*, *41*(2–3). <u>https://doi.org/10.23978/inf.122592</u>

Murat, B., Noyons, E. & Costas, R. (2023). Exploratory analysis of policy document sources in Altmetric.com and Overton [preprint]. *27th International Conference on Science, Technology and Innovation Indicators (STI 2023).* https://doi.org/10.55835/6442b915bdab695b3f03d666

Nigel Gilbert, G. (1977). Referencing as persuasion. *Social studies of science*, 7(1), 113-122.

Pallari, E., Eriksson, M., Billhult, A., Billhult, T., Aggarwal, A., Lewison, G., & Sullivan, R. (2021). Lung cancer research and its citation on clinical practice guidelines. *Lung Cancer*, *154*, 44–50. <u>https://doi.org/10.1016/j.lungcan.2021.01.024</u>

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Pinheiro, H., Vignola-Gagné, E., & Campbell, D. (2021). A large-scale validation of the relationship between cross-disciplinary research and its uptake in policy-related documents, using the novel Overton altmetrics database. Quantitative Science Studies, 1–27. https://doi.org/10.1162/qss\_a\_00137

Szomszor, M., & Adie, E. (2022). *Overton—A bibliometric database of policy document citations. Quantitative Science Studies*, 3(3), 624-650. https://doi.org/10.1162/qss\_a\_00204

Vilkins, S., & Grant, W. J. (2017). Types of evidence cited in Australian Government publications. *Scientometrics*, *113*(3), 1681–1695. <u>https://doi.org/10.1007/s11192-017-2544-2</u>

Willis, C. D., Riley, B., Stockton, L., Viehbeck, S., Wutzke, S., & Frank, J. (2017). Evaluating the impact of applied prevention research centres: Results from a modified Delphi approach. *Research Evaluation*, *26*(2), 78–90. <u>https://doi.org/10.1093/reseval/rvx010</u>

#### APPENDIX

Version	Number of	Number of	Percentage	Number of	Percentage	Number of	Percentage	Number of	Percentage
	publication	OA	of OA	DOI referred	of OA	non-OA	of non-OA	non-OA	of non-OA
	with DOI	publication	publication	to in Overton	publication	publication	publication	publication	publication
					referred to in			referred to in	referred to
					Overton			Overton	in Overton
July 2023	128,917,393	42,529,792	33.0%	1,682,438	4.0%	86,387,601	67,0%	2,903,260	3.4%
November	152.247.367	4.721.899	32.9%	1.861.406	3.7%	102.153.040	67.1%	2.860.493	2.8%
2023		.,		.,		,,		_,,	
April 2023	52,142,628	18,070,184	34.7%	1,321,625	7.3%	34,072,444	65,3%	1,952,837	5.7%
September	57,672,454	19,198,775	33.3%	1,325,503	6.9%	38,473,679	66,7%	2,229,754	5.8%
2023									
	Version July 2023 November 2023 April 2023 September 2023	Version Number of publication with DOI   July 2023 128,917,393   July 2023 152,247,367   2023 52,142,628   September 57,672,454   2023 57,672,454	Version Number of publication with DOI Number of OA publication   July 2023 128,917,393 42,529,792   November 152,247,367 4,721,899   2023 52,142,628 18,070,184   September 57,672,454 19,198,775	Version Number of publication with DOI Number of OA publication Percentage of publication   July 2023 128,917,393 42,529,792 33.0%   November 2023 152,247,367 4,721,899 32.9%   April 2023 52,142,628 18,070,184 34.7%   September 2023 57,672,454 19,198,775 33.3%	Version Number of publication with DOI Number of OA publication Percentage of publication Number of DOI referred to in Overton   July 2023 128,917,393 42,529,792 33.0% 1,682,438   November 152,247,367 4,721,899 32.9% 1,861,406   April 2023 52,142,628 18,070,184 34.7% 1,321,625   September 57,672,454 19,198,775 33.3% 1,325,503	VersionNumber of publication with DOINumber of OA publicationPercentage of DA publicationNumber of OA publicationPercentage 	VersionNumber of publicationNumber of OA publicationPercentage of publicationNumber of of OA publicationPercentage of DOI referred to in OvertonNumber of of OA publicationNumber of of OA publicationPercentage of OA publicationNumber of of oA publicationNumber of of OA publicationPercentage of OA publicationNumber of of oA publicationNumber of of OA publicationPercentage of OA publicationNumber of of oA publicationNumber of of oA publicationNumber of of oA publicationNumber of of OA publicationPercentage of OA publicationNumber of of OA publicationNumber of of oAPercentage oANumber of oANumber of oANumber of oANumber of oANumber of oANumber o	VersionNumber of publicationNumber of OA publicationPercentage of oA publicationNumber of of OA publicationPercentage of OA publicationNumber of of OA publicationPercentage of OA publicationNumber of of oA publicationPercentage of oA publicationNumber of of oA publicationPercentage of oA publicationNumber of of oA publicationPercentage of oA publicationNumber of of oA publicationPercentage of oA publicationNumber of of oA publicationPercentage of oA publicationNumber of of oA publicationPercentage of oA publicationNumber of of oA publicationPercentage of oA publicationNumber of of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oA publicationPercentage of oAPercentage of oAPercentage of oAPercentage of oAPercentage of oAPercentage of oAPercentage of oAPercentage of oAPercentage of oAPercentage of oAPercentage of oAPercentage of oAPercentage of oAP	VersionNumber of publicationNumber of OA publicationPercentage of of publicationNumber of of OA publicationPercentage of OA publicationNumber of of OA publicationPercentage of OA publicationNumber of of of on-OA publicationPercentage of of on-OA publicationNumber of of on-OA publicationPercentage of of oA publicationNumber of of oA publicationPercentage of oA publicationNumber of non-OA publicationPercentage of non-OA publicationNumber of non-OA publicationPercentage of non-OA publicationNumber of non-OA publicationNumber of non-OA publicationNumber of non-OA publicationNumber of non-OA publicationNumber of non-OA publicationNumber of non-OA publicationNumber of non-OA publicationNumber of non-OA publicationJuly 2023128,917,39342,529,79233.0%1,682,4384.0%86,387,60167,0%2,903,260November 2023152,247,3674,721,89932.9%1,861,4063.7%102,153,04067.1%2,860,493April 202352,142,62818,070,18434.7%1,321,6257.3%34,072,44465,3%1,952,837September 202357,672,45419,198,77533.3%1,325,5036.9%38,473,67966,7%2,229,754

Table 2 The overall distribution of OA status in bibliometric databases

# DAY 1

SESSION 3.2 / Societal Impact: Evaluation Practice



# The Preconditions for Implementing Responsible Research Assessment: Addressing Policy Alienation

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Evaluation is inherent to the scientific process itself, as it plays a pivotal role in shaping knowledge production, acting as both a gatekeeper and validator of knowledge, and establishing benchmarks for research quality (Lamont & Huutoniemi, 2011). Nevertheless, research evaluation is not only about the scientific community working for their own goals, but the increased interest towards developing assessment practices goes together with the heightened demands for transparence and efficiency of universities. Coupled with decreasing research funding, the imperative to ensure optimal utilization of resources have compelled universities to demonstrate more and more their accountability (Oschner & Bulaitis 2023).

Even though the problems involved in research evaluation methods and especially in the indicators used in evaluation have been commonly acknowledged in the fields of bibliometrics and science studies, only within the last decade or so they have reached the awareness of the wider scientific community (Himanen et al. 2024). The start of a wider discussion can be pinpointed to the San Francisco Declaration on Research Assessment, DORA, published in 2012. Since then, several other principles for responsible research assessment have been published, for example the Metric Tide, Leiden Manifesto, and the Hong Kong Principles, all building on each other, continuing to define responsible research assessment. The latest and the most comprehensive is the European Agreement on Reforming Research Assessment. To date, 724 organisations have signed the agreement. (Hicks 2015; Wilsdon 2015; Moher et al. 2020; European University Association 2022).

But signing up to declarations and principles is relatively easy, the real challenge is in implementing the principles. For implementation to succeed, it is imperative that the scientific community, more specifically the researchers involved in evaluations as evaluators and targets of evaluations, are committed to the reform.

The assessment systems shape the research landscape by dictating funding, recognition, and career advancement opportunities. In the ideal world of assessments, researchers would be constantly adapting to evolving frameworks, methodologies, and expectations. Understanding how researchers respond to these

changes in research assessments provides insights into the complex interplay between institutional demands and individual scholarly pursuits.

# RESEARCHERS' RESPONSES TO THE CHANGING RESEARCH ASSESSMENT SYSTEMS

In the academic landscape, researchers utilize a range of strategies in response to evolving assessment systems. Linkova (2014) discusses six categories capturing researchers' responses to the changes in the research assessment systems: compliance, rejection, compromise, camouflage, circumvention, and gaming techniques. Some researchers tend to endorse the system, aligning with its "new" criteria, like entrepreneurial ethos and framing their actions as pursuing excellence in global science (*compliance*). Conversely, others reject the system on epistemic and ethical grounds, invoking autonomy and independence, and relying on traditional notions of peer review (*rejection*). Many opt for a compromise strategy, balancing various expectations and placating the assessment system while striving to maintain research quality (*compromise*). Researchers also employ tactics such as dressing up results to fit assessment criteria (*camouflage*) or continuing preferred research while meeting system requirements (*circumvention*). Moreover, strategies encompass practices like salami publishing, shingling, and creating outputs that count without much merit (*gaming techniques*). (Linkova 2014; see also Oliver 1991).

#### AIM OF THE STUDY

The study focuses on the experiences related to resisting research assessment (cf. 'strategy of rejection' Linkova 2014; see also Anderson 2008). Previous research has highlighted that negatively inclined responses often stem from situations where there is a significant disparity between policy ideals and research practices. This discrepancy can also raise concerns about *policy alienation* (Tummers 2012, 14), characterized by a detachment from the advocated policies (see also De Jong et al. 2016; Lilja 2020). The research interests will be operationalized by studying experiences related to frustration, disappointment, annoyance, and irritation towards research assessment, paying special attention to expressions describing the idea of policy alienation.

#### DATA

The data consists of the survey conducted by the Federation of Finnish Learned Societies in the end of 2023. It targets researchers working in various organizations, academic fields, and career stages in Finland. We received a total of 440 responses. The focus is on the open-ended questions of the survey (roughly half of the respondents responded to the open-ended questions), and particularly the final question which addresses "other comments". This specific question in the survey proved to be crucial in eliciting researchers' experiences relating to the policy

alienation. We will particularly discuss the topic from the perspective of researchers working in the fields of social sciences and humanities.

#### REFERENCES

Anderson, G. (2008) Mapping Academic Resistance in the Managerial University. *Organization*, *15*(2), 251–270. <u>https://doi.org/10.1177/1350508407086583</u>

De Jong, S., Smit, J. & van Drooge, L. (2016) Scientists' response to societal impact policies: A policy paradox, *Science and Public Policy*, *43*(1), 102–14, <u>https://doi.org/10.1093/scipol/scv023</u>

European University Association et al. (2022) *Agreement on Reforming Research Assessment*.

Hicks et al. (2015) 'Bibliometrics: The Leiden Manifesto for research metrics'. *Nature* 520: 429–431. <u>https://doi.org/10.1038/520429a</u>

Himanen L, Conte E, Gauffriau M *et al.* The SCOPE framework – implementing the ideals of responsible research assessment [version 1; peer review: 2 approved with reservations]. *F1000Research* 2023, 12:1241 (https://doi.org/10.12688/f1000research.140810.1)

Lamont, M. & Huutoniemi, K. (2011) Comparing Customary Rules of Fairness: Evaluative Practices in Various Types of Peer Review Panels. Camic C, Gross N, Lamont M, (eds.). *Social knowledge in the making.* University of Chicago Press.

Lilja, E. (2020) Threat of policy alienation: Exploring the implementation of Open Science policy in research practice, *Science and Public Policy*, 47(6) 803–817, <u>https://doi.org/10.1093/scipol/scaa044</u>

Linkova, M. (2014) "Unable to resist: Researchers' responses to research assessment in the Czech Republic" *Human Affairs*, vol. 24, no. 1, 2014, pp. 78-88. <u>https://doi.org/10.2478/s13374-014-0207-z</u>

Moher, D. et al. (2020) 'The Hong Kong Principles for assessing researchers: Fosteringresearchintegrity'. PLOSe3000737. <a href="https://doi.org/10.1371/journal.pbio.3000737">https://doi.org/10.1371/journal.pbio.3000737</a>

Oliver, C. (1991). Strategic Responses to Institutional Processes. *The Academy of Management Review, 16*(1), 145–179. <u>https://doi.org/10.2307/258610</u>

Oschner, M. & Bulaitis, Z. H. (2024) Accountability in Academic Life. European Perspectives on Societal Impact Evaluation, Edward Elgar Tummers, L. (2012) Policy Alienation of Public Professionals: The Construct and Its Measurement. *Public Administration Review*, *72*(4), 516–525. <u>http://www.jstor.org/stable/41506802</u>

Wilsdon, J. et al. (2015) *The Metric Tide: Report of the Independent Review of the Role of Metrics in Research Assessment and Management*. DOI: 10.13140/RG.2.1.4929.1363

# Recognizing Societal Impact: Discourse Analysis of Assessment Reports on Research Performance in Lithuania

#### Liutauras Kraniauskas Klaipėda University, Lithuania

In 2023, the Research Council of Lithuania organized an assessment of research performance in Lithuania. It benchmarked all national research institutions and covered all disciplines. 13 international expert panels provided reports on 85 research units and gave their views on the research excellence, societal and economic impact, and development potential of the R&D units of assessment. In January 2024, the assessment reports were presented to the public along with reflections by the chairs of the panels about the organization of the assessment. The assessment has been done in the style of the REF for the second time in Lithuania. It was considered as a more technocratic processing of data on research for the distribution of state funding and has not triggered any political criticism or methodological disputes among academic communities as it had in 2018.

Despite abstract claims about harsh times, uncertainties, low budgets, or even the crisis of the humanities in Lithuania, the humanities got the highest scores on the societal impact scale, leaving behind all other sciences. Technological and health sciences got the lowest assessment on this scale. Anyone hardly expected such results, especially in the context of national science policy obsessed with technological innovations. Administrators and managers with rather sceptical attitudes toward the humanities interpret the findings as playing the system and concealing reality with learned discursive practices. While the subject of distorted reality or playing the system belongs to the field of ideology and conspiracy studies, discursive practices—words, phrases, and topics as empirical representations of the discourse—may be approached in a more systematic manner.

In my presentation, I would like to discuss the findings of the content analysis of 85 assessment reports. Analysing sections on the societal impact I focus on two topics:

- How is discourse on the societal impact constructed by the experts? What do the experts refer to as important to support their arguments for scoring the impact?
- How do the patterns of argument on societal impact differ in the natural sciences, social sciences, and humanities?

The underlying patterns are explored with techniques of co-occurrence analysis and topic extraction by the Al.

Early findings suggest that the discourse is strongly structured by the patterns of data provided for the assessment. In many cases, experts in their accounts simply

reproduce preestablished structures of data processing. (What you ask is what you get.) More interesting results are how experts view and value the external links in research communities. For example, networking of scholars on a European level is more valued in the SSH than in the natural sciences, while references to commercial partners and companies are more important in proving the societal impact of technological sciences.

### Collaboration Between Academic Researchers and Non-Academics in SSH: A Network Perspective

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In recent years, more attention has gone to the various ways in which university researchers interact with broader society, through collaborating with industry, government, and other social actors. Collaboration has a central role in innovation literature, often focusing on STEM fields' collaboration with industry partners (Abramo et al., 2011; Meyer-Krahmer & Schmoch, 1998), but collaboration beyond the academy has also been considered important for the Social Sciences and Humanities (SSH) (Cherney, 2015; Jacob & Jabrane, 2018; Kotiranta et al., 2020). Collaborations are not restricted to companies but also include government institutions, NGOs, civil society organisations, museums, and artistic organisations. Collaboration can take various forms, including informal collaborations, formal partnerships, contract research, and consultancy work (Olmos-Peñuela et al., 2014).

Our main study goal is to find out to what extent co-authorships with non-university organizations are mediated by authors with a double affiliation at both a university and non- university organization. Our interest in double affiliations was sparked by the initial data exploration, where we noticed that authors frequently hold positions at more than one institution. Could these authors perform a brokering role in collaborations with non-academic organizations as they are a part of both worlds? Previous research has indicated that authors with dual appointments' tendencies to co-author with non-academic partners depend on the type of appointment, with differences noted between appointments in the private sector vs. the public sector (Cattaneo et al., 2019).

In this study, we focus on the co-authorship links that routinely exist between researchers employed by universities and non-academic organisations. With this approach, we heed the call of Sivertsen and Meijer (2020) to pay attention to 'normal societal impact' or 'societal interaction' rather than 'extraordinary societal impact'. Normal societal impact takes different forms in different research areas and societal sectors. Some areas of research may have 'logical collaborators' outside university walls. We aim to lay bare those frequent collaborators as they

form an important aspect of societal interaction. Taking stock of the current levels of collaboration with non-university actors highlights the many links that academic research already has with non-academic partners. We take a network perspective on co-authorship, paying attention to authors who function as 'bridges' between universities and non-university organisations.

This study is based on data provided by the VABB-SHW, a Flemish regional database of SSH publications. The data is collected in the context of the Flemish Performance-Based Research Funding System (PRFS). The data has been enriched with affiliation information upon request by the Flemish government so that it can be used in the internationalization parameter of the PRFS (Aspeslagh et al., 2021). 21 351 publications approved by the Authoritative Panel (and thus considered peer-reviewed), but not indexed in the Web of Science were coded to include affiliation information on the publication level. While most of these co-authorships are restricted to authors affiliated with universities, 6326 publications (or almost 30 %) also include non-university organizations. We decided to construct a co-authorship network.

We adopt the 'gefura' measure, a network indicator to measure the extent to which a node bridges between different groups - academic and non-academic - in the coauthorship network. A simple version of this indicator was proposed by Flom et al. (2004) and later generalized (Guns & Rousseau, 2015). The gefura measure is a centrality measure similar to betweenness centrality, intended to indicate how important a node (here: an author) is to establish the shortest paths between different node groups. We consider the university organizations and the various nonuniversity organizations as different groups of the network: companies, government organizations, research institutes, healthcare organizations, non-profit organizations, and museums and archives. A node can belong to several groups. With this network measure, we identify authors who are more important to the connection between different groups. We can then see whether authors with double affiliations are more likely to have high gefura scores. First, we calculate the gefura measures for the humanities publications. Here, authors with a double affiliation have higher average gefura scores, suggesting that these authors connect people employed in academia with people employed outside of academia in co- authored publications. The further stages of this research will be dedicated to unpacking whether there are disciplinary differences in the brokering role of different authors in the network.

The main limitation of this approach is that the network of publications is restricted to those publications involving at least one author affiliated with an SSH department at one of the Flemish universities. Publications authored solely by people unaffiliated with a Flemish university are thus not included. We can assume, however, that the number of scholarly publications not authored by academics is probably limited. There are a few factors that could drive co-authorships with non-university partners. The first is the science-policy focus on collaboration and societal impact. The science policy attempt to steer researchers towards ' societally relevant' research could prompt researchers to upscale their interactions with non-university partners. The SIAMPI framework (Spaapen & Van Drooge, 2011) has been created to evaluate societal impact through productive interactions. Meanwhile, an SSH-specific program was designed in Sweden to enhance cooperation between extra-academic organizations and universities and allow a flow of researchers between these organization types (Jacob & Jabrane, 2018). Initiatives such as these could affect collaboration practices on the ground. Secondly, the Flemish PRFS provides an incentive towards collaboration through its use of a whole-counting method in its publication metric (Engels & Guns, 2018) although it is unclear to what extent the funding mechanism impacts co-authorship.

Finally, the number of PhDs has increased in the past decades, while the number of postdoc opportunities and faculty positions has not risen accordingly (Debacker, 2023). There is concomitantly a larger pool of academically trained people working outside of universities, working part-time outside of academia, or moving in and out of academia. The result could be a greater availability of potential collaborators outside of universities.

#### REFERENCES

Abramo, G., D'Angelo, C. A., & Di Costa, F. (2011). University-industry research collaboration: A model to assess university capability. Higher Education, 62(2), 163–181. <u>https://doi.org/10.1007/s10734-010-9372-0</u>

Aspeslagh, P., Engels, T., & Guns, R. (2021). The road towards structured affiliation information in a national bibliographic database. Proceedings of the ICTeSSH 2021 Conference. <u>https://doi.org/10.21428/7a45813f.51be98be</u>

Cattaneo, M., Horta, H., & Meoli, M. (2019). Dual appointments and research collaborations outside academia: Evidence from the European academic population. Studies in HigherEducation, 44(11), 2066–2080. https://doi.org/10.1080/03075079.2018.1492534

Cherney, A. (2015). Academic–industry collaborations and knowledge co-production in the social sciences. Journal of Sociology, 51(4), 1003–1016. https://doi.org/10.1177/1440783313492237

Debacker, N. (2023). Vlaams Indicatorenboek–3.3.4 Trends in het academisch carrièrepad Vlaams. <u>https://www.vlaamsindicatorenboek.be/3.3.4/trends-in-het-academisch-Carrierepad</u>

Engels, T. C. E., & Guns, R. (2018). The Flemish Performance-based Research Funding System: A Unique Variant of the Norwegian Model. Journal of Data and Information Science, 3(4), 45–60. <u>https://doi.org/10.2478/jdis-2018-0020</u>

Flom, P., Friedman, S., Strauss, S., & Neaigus, A. (2004). A new measure of linkage between two sub- networks. Connections, 26(1), 62-70.

Guns, R., & Rousseau, R. (2015). Unnormalized and normalized forms of gefura measures in directed and undirected networks. Frontiers of Information Technology & Electronic Engineering, 16(4), 311–320. <u>https://doi.org/10.1631/FITEE.1400425</u>

Jacob, M., & Jabrane, L. (2018). Being there in the flex: Humanities and social science collaborations with nonacademic actors. Studies in Higher Education, 43(10), 1718–1729. <u>https://doi.org/10.1080/03075079.2018.1520414</u>

Kotiranta, A., Tahvanainen, A., Kovalainen, A., & Poutanen, S. (2020). Forms and varieties of research and industry collaboration across disciplines. Heliyon, 6(3). e03404. <u>https://doi.org/10.1016/j.heliyon.2020.e03404</u>

Meyer-Krahmer, F., & Schmoch, U. (1998). Science-based technologies: Universityindustry interactions in four fields. Research Policy, 27(8), 835–851. <u>https://doi.org/10.1016/S0048-7333(98)00094-8</u>

Olmos-Peñuela, J., Molas-Gallart, J., & Castro-Martínez, E. (2014). Informal collaborations between social sciences and humanities researchers and non-academic partners. Science and Public Policy, 41(4), 493–506. https://doi.org/10.1093/scipol/sct075

Sivertsen, G., & Meijer, I. (2020). Normal versus extraordinary societal impact: How to understand, evaluate, and improve research activities in their relations to society? Research Evaluation, 29(1), 66–70. <u>https://doi.org/10.1093/reseval/rvz032</u>

Spaapen, J., & Van Drooge, L. (2011). Introducing 'productive interactions' in social impact assessment. Research Evaluation, 20(3), 211–218. https://doi.org/10.3152/095820211X12941371876742

# DAY 2

# SESSION 4.1 / Open Access and Community Building

RESSI 2024 May 23-24 | Galway, Ireland

# "Support in Principle, Vague in Practice": Exploring Systemic Barriers to Open Access Publishing Among Humanities and Social Sciences Researchers

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#### INTRODUCTION

Open access (OA) publishing is fundamental for ensuring equitable access to research outputs (Evans, 2012). However, research has shown that OA uptake in the humanities and social sciences disciplines (HSS) has remained low (Piwowar et.al., 2018). Besides the known barriers to OA publishing such as article processing charges (e.g., Momeni et al., 2022), the low adoption of OA in most HSS disciplines has been linked to research evaluation metrics (Laakso & Bjork, 2022). This is because most tenure and promotion requirements favour publishing in recognized top-tier journals, which are usually behind paywalls. As Larivière et al. (2015) submitted, "young researchers need to publish in prestigious journals to gain tenure, while older researchers need to do the same in order to keep their grants" (p. 13). This explains why many researchers are stuck with publishing in non-OA journals, despite being supportive of the potentials and ideals of OA.

The San Francisco Declaration on Research Assessment (DORA) stresses that "incorporating open access activities as explicit criteria in researcher assessment is important for the sake of scientific progress—and its ability to efficiently address societal challenges" (DORA, 2018, p. 2). As such, it is imperative for higher education institutions to actively revamp their research evaluation policies and recognize OA publishing and advocacy in research and tenure evaluation. Although Canada is one of the few countries with national OA policies (Hurrell, Smith & Wake, 2017), little is known about the barriers limiting OA publishing uptake, particularly in the HSS disciplines. Hence, this study filled this gap in knowledge by answering the research question, what are the systemic barriers limiting OA publishing among HSS researchers in research-intensive universities in Canada?

#### METHODS

This study employed qualitative research design and collected data using semistructured in-depth interviews (Pickard, 2013), conducted online via Zoom. The study participants included 20 professors from the U15 (research-intensive universities) in Canada, drawn from the HSS disciplines. Owing to the low uptake of OA in the HSS disciplines when compared to the STEM disciplines (Piwowar et.al., 2018), it became imperative to explore factors limiting OA publishing practices in these disciplines. Interview sessions lasted for approximately 60 minutes and were audio recorded. Audio records were transcribed completely verbatim. Participants' names and identities were anonymized using pseudonyms. Data was analyzed with NVivo software, following the (reflective) thematic analysis procedure (Braun & Clarke, 2021).

#### FINDINGS

This section discusses three themes that emerged from the analysis.

#### Tenure and promotion requirements

Findings showed that tenure and promotion requirements in participants' universities largely favour publishing in non-OA subscriber-based journals. Many participants who are early career researchers (ECRs) believed they are expected to publish in toptier journals. For instance, Evelyn discussed, "I haven't really pursued open access journals specifically because I'm pre-tenure and most of the so-called high-quality journals that I can keep publishing are not open access." This supports existing studies which found that "promotion is tied to publications in prestigious outlets known for years to publish the most widely regarded, highly cited scholarship" (Brienza, 2012, p. 166). This poses a serious challenge to junior researchers who want to publish in OA journals, because they may risk their careers if they boycott the subscription-based outlets where they are expected to publish (Jamali et al., 2020).

#### Prestige and impact factors

Some participants associated OA journals with low prestige because many OA journals are new and cannot favourably compete with older journals that have enjoyed age-long recognition and prestige. As Grayson discussed, "newer outlets are more likely to be open access and so there's that disincentive in that sense." This suggests that there is a disincentive to publish in OA journals as they are often newer outlets with limited prestige and recognition. This is discouraging to many participants as they are expected to publish in prestigious outlets. As Emma stated, "major prestigious journals are for the most part not open access. That is a major barrier. If I want to be publishing in things that are widely recognized...that's going to be a challenge." This is particularly important as researchers often measure the quality of journals by the quality of peer-reviews and reputation of the journals (Coonin, 2011).

#### Limited institutional support for OA

Findings revealed that participants are confronted with two realities-principle and practice-when deciding on publishing OA. In principle, participants believed they should be publishing OA, but in practice, institutional policies do not encourage OA publishing. As Evelyn lamented, "I don't really see any institutional support for trying to pursue open access." Similarly, Olivia submitted, "I would say that the norm in [my

discipline] is to support it in principle and then be a bit vague about how to achieve it in practice." As such, some participants are stuck with the ideals of OA publishing, without translating these principles to meaningful practice. An existing study reported that researchers lack effective institutional support to maximize their own research impact through OA publishing (Marcella et al., 2018).

#### CONCLUSION

While there is a growing support for OA publishing among HSS researchers, their practices have been limited by systemic and institutional barriers. This study found that tenure requirements which favour publications in top-tier journals have systemically conditioned many ECRs to publish in traditional outlets to the detriment of OA outlets. Unless there are policy reforms in research evaluation requirements, OA uptake will continue to lag in the HSS disciplines. Higher education institutions and research evaluation committees should implement effective ways of evaluating research outputs, without giving prominence to the metrics systems and indices that favour pay-walled traditional journals. Universities should also adopt OA publishing policies and knowledge mobilization strategies that would spur and motivate researchers to actively think about publishing OA.

#### REFERENCES

Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? Qualitative Research in Psychology, 328-352.

Brienza, C. (2012). Opening the Wrong Gate? The academic spring and scholarly publishing in the humanities and social sciences. Publishing Research Quarterly, 28(3), 159-171.

Coonin, B. (2011). Open access publishing in business research: The authors' perspective Journal of Business & Finance Librarianship, 16(3), 193-212.

DORA. (2018, October 25). Incorporating open access activities as explicit criteria in researcher assessment. DORA. Retrieved from <a href="https://sfdora.org/2018/10/25/incorporating-open-access-activities-as-explicit-criteria-in-researcher-assessment/">https://sfdora.org/2018/10/25/incorporating-open-access-activities-as-explicit-criteria-in-researcher-assessment/</a>

Evans, M. A. J. (2012). Open access to scientific literature: An assessment of awareness support and usage among academic librarians at Historically Black Colleges and Universities. (Ph.D.). Southern University and Agricultural and Mechanical College, Ann Arbor

Hurrell, C., Smith, R., & Wake, R. (2017). Tri-agency open access policy: Navigating requirements for grant holders. Retrieved from <u>http://hdl.handle.net/1880/51975</u>

Jamali, H. R., Nicholas, D., Herman, E., Boukacem-Zeghmouri, C., Abrizah, A., Rodríguez-Bravo, B., . . . Watkinson, A. (2020). National comparisons of early career

researchers' scholarly communication attitudes and behaviours. Learned Publishing, 33(4), 370-384.

Laakso, M., & Björk, B. C. (2022). Open access journal publishing in the business disciplines: A closer look at the low uptake and discipline-specific considerations. Journal of Librarianship and Information Science, 54(2), 216-229.

Larivière, V., Haustein, S., & Mongeon, P. (2015). The oligopoly of academic publishers in the digital era. Plos One, 10(6), e0127502.

Marcella, R., Lockerbie, H., Bloice, L., Hood, C., & Barton, F. (2018). The effects of the research excellence framework research impact agenda on early-and mid-career researchers in library and information science. Journal of Information Science, 44(5), 608-618.

Pickard, A. J. (2013). Research methods in information: Facet publishing.

Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., . . . Haustein, S. (2018). The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. PeerJ, 6, e4375.

# Attitudes towards Open Monographs in the European Research Area

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#### INTRODUCTION

This paper presents the analysis of interviews conducted in the framework of the PALOMERA project with the key stakeholders: researchers, librarians, publishers, research funding agencies and policymakers throughout the European Research Area. The study aims to shed light on the perspective of the attitudes towards the open monographs, trying to describe common threads in ERA countries. The key takeaway is that despite the small number of OA policies across ERA (and even a lower number of policies including monographs), the open academic books seem to be gaining momentum, supported bottom-up by various institutions and funders.

PALOMERA (Policy Alignment of Open Access Monographs in the European Research Area) is a two-year Horizon Europe project aiming at speeding up the transition to open access for books by providing recommendations and concrete resources to support and coordinate institutional and funder OA policies. The project seeks to understand the state of the art concerning OA book policies by collecting documentation (policies and contextual material), surveying key stakeholders, and obtaining in-depth contextual knowledge through interviews. To capture the multifaceted context of open access (OA) book publishing, the analysis focuses on the political, economic, social, technological, legal, and environmental (PESTLE) dimensions of the issue.

Academic books are defined here as scholarly, peer-reviewed, books including monographs, book chapters, edited collections, critical editions, and other long-form scholarly works. When conducting research we maintain an inclusive approach, i.e. follow how the academic books are defined in each analysed country, including the variety of quality assessment practices they undergo. However, the field of science policy and practice regarding open access (OA) books is constantly evolving within scholarly circles. Hence, numerous aspects remain unclear, including the quantity of OA books and the extent of their preservation coverage (Laakso, 2023).

#### METHODOLOGY

The research team covered 39 ERA countries and all stakeholder categories through 39 individual interviews and 3 group interviews. In total, 47 interviewees took part in interviews: 24 women and 23 men. All interviews lasted around 60 minutes. The interviews were transcribed with HappyScribe, translated into English via DeepL (if needed), proofread and anonymised. The interviews were precoded for PESTLE categories in MaxQDA and later coded in vivo.

#### RESULTS

Although the first round of coding is still ongoing (expected to be finalised by the end of February 2024), the initial analyses yield interesting results.

#### 1. Research assessment

The lack of clear regulations and policies regarding open-access scholarly monographs does not seem to prevent the publication of OA books. It does, however, lead to difficulties in the publishing process, related to both the legal aspects of publishing books in open access, i.e. copyright, licensing, and the technological dimension of publishing – the availability of infrastructures, the standard of content or metadata. Interestingly, in the absence of national OA policy is often offset by funder's or institutional regulations requiring the beneficiaries of research or publishing grants to make their work available in the OA. However, the interviewees made it clear that in the absence of reward systems, the funder's requirement remains the only incentive to publish in the OA.

Finding a balance between requiring and encouraging author engagement with OA monographs is crucial. Academics feel burdened if excessive responsibility is imposed on them. Emphasizing the excellence and reputation of OA (in hiring, evaluations, etc.) while providing detailed information on opportunities and publishing workflows is equally essential to encourage academics to publish OA. When it comes to mandates, it's important to recognize that additional obligations on academic institutions often lack sufficient funding (Adema 2019: 31).

#### 2. Multilingualism

Quite paradoxically, open science may be seen as a threat to multilingualism. Openness is often connected to the issues of transparency and excellence and thus becomes a part of internationalization strategies (cf. Kulczycki et al. 2019). Consequently, the issues of visibility come into play, one interviewee reached a telling conclusion that "books in English are more visible than books in [add. national language] Bulgarian" (20230928\_BG\_RPO\_PALOMERA), in other words, the opportunities to publish open monographs seem to favour the works in English. Another challenge perceived in this context is a possible domination of the commercial English-only publishers over the publication in local languages.

#### 3. Prestige

Researchers are expected to prioritize the dissemination of their research findings through what are deemed the most esteemed channels. The concepts of "excellence" and "quality" (Lamont 2009; Moore et al. 2017) within academia, as well as the prevailing culture of academic prestige (Fyfe et al. 2017) and the method of "quantified control" for funding allocation (Burrows 2012), significantly influence how research book publishers' quality and prestige are perceived.

Monographs in open access are often perceived by authors as less prestigious than traditionally printed books (Maryl et al. 2021) or even, as marked by one of the interviewees "there is no prestige being in open access" (20230825\_SK\_RPO\_PALOMERA). It rather applies to monographs published exclusively online and not so much to those digitised but originally published traditionally in print. As for the roots of those attitudes, the interviewees mentioned the lack of trust in OA formats caused by vanity publishing practices and predatory publishers. As Martin Paul Eve suggests, this may be also due to the relative novelty of OA and more time needs to pass for the prestige accumulated with open access outlets (Eve 2014: 50).

#### REFERENCES

Adema, J. (2019). Towards a Roadmap for Open Access Monographs: A Knowledge Exchange Report. Zenodo. https://doi.org/10.5281/zenodo.2644997

Burrows, R. (2012). Living with the H-Index? Metric Assemblages in the Contemporary Academy. The Sociological Review, 60, 355–372. https://doi.org/10.1111/j.1467-954X.2012.02077.x

Dagienė, E. (2023). Prestige of scholarly book publishers—An investigation into criteria, processes, and practices across countries. Research Evaluation, 32(2), 356–370. https://doi.org/10.1093/reseval/rvac044

Fyfe, A., Coate, K., Curry, S., Lawson, S., Moxham, N., & Røstvik, C. M. (2017). Untangling Academic Publishing: A History of the Relationship between Commercial Interests, Academic Prestige and the Circulation of Research. Zenodo. https://zenodo.org/record/546100#.WgRImFVI9yw

Moore, S., Neylon, C., Paul Eve, M., Paul O'Donnell, D., & Pattinson, D. (2017). "Excellence R Us": University Research and the Fetishisation of Excellence. Palgrave Communications, 3, 16105. https://doi.org/10.1057/palcomms.2016.105

Laakso, M. (2023). Open access books through open data sources: Assessing prevalence, providers, and preservation. Journal of Documentation. Advance online publication. https://doi.org/10.1108/JD-02-2023-0016

Lamont, M. (2009). *How Professors Think*. Harvard University Press. https://doi.org/10.4159/9780674054158

Eve, M. P. (2014). Open Access and the Humanities: Contexts, Controversies And The Future. Cambridge: Cambridge University Press.

Kulczycki, E., Rozkosz, E. A., & Drabek, A. (2019). Internationalization of Polish Journals in the Social Sciences and Humanities: Transformative Role of The Research Evaluation System. Canadian Journal of Sociology, 44(1), 9–38. https://doi.org/10.29173/cjs28794

# Understanding the community-led publishing ecosystem at the University of Cambridge

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Open research (OR) is rapidly becoming the new normal for scholarly communications. The ethos of OR is to promote the transparency, equity, and inclusion of research by ensuring that it is accessible to all, regardless of one's academic background, location in the world, or institutional affiliation. OR champions these principles across the whole research lifecycle – from conception to publication and beyond – and includes, for instance, the sharing of data and other outputs such as manuscripts and monographs. Various open access models have dictated the ways in which publications can be shared and accessed. These include pay-to-publish and/or pay-to-read options (green open access), pay-to-publish and free-to-read options (gold open access), or a mixture of the two (hybrid open access). These models have various cost implications as stipulated by publishers, and which usually fall onto the researcher with costs being covered by grants, research funding, or via institutional agreements. This leaves many researchers unable to publish their outputs openly, resulting in a payment-or-paywall impasse.

In parallel to this system, a researcher-driven movement has emerged, where researchers bypass publishing houses by establishing their own community-led journals that serve their fields. These community-led journals are usually housed within university departments, run by graduate students, academics or librarians, and are oftentimes payment-free for both authors and readers (known as diamond open access). Though they publish for a variety of reasons, community-led journals live up to the ethos of OR and represent a challenge to the financial blockers that come with standard publishing models. This is particularly important in small and interdisciplinary niches in the Humanities and Social Sciences given the limited availability of funding in general, and for publishing in particular. In response to this emerging avenue of publication, this study aims to identify and understand the various community-led publishing initiatives that have been established at the University of Cambridge. Garnering this information can help to build a better picture of these initiatives, understand what they do, what motivates them, and why as well as provide insight as to how the University might support this ecosystem. In turn, results will inform us about the utility of alternative publishing avenues for researchers, not only in Cambridge, but all over the world. Through an initial landscape analysis, we mapped the varied community-led journal initiatives across the University that we could find and sorted them according to high-level categories (e.g., date established, discipline, publication frequency, editorial leadership, open access model). We then qualitatively explored the practices and motivations of these community-led publishing initiatives within Cambridge by purposefully selecting journals from a range of disciplines and inviting editorial members to be interviewed. Ethical clearance was obtained from the Cambridge Higher Education Research Ethics Committee. Thirty-five community-led publishing initiatives were identified across a range of Social Science and Humanities disciplines. They are maintained entirely by volunteer members (usually on a rolling basis), and rely on limited financial and technical support, ranging from the ad hoc and sporadic to projects operating with a degree of regularity and sustainability. Following this review, members of the editorial teams (e.g., founders, editors-in-chief, managing editors) of 20 journals were invited to participate in an interview. A total of nine semi-structured interviews were conducted online with representation from diverse journals: Archaeological Review from Cambridge; Cambridge Journal of Human Behaviour; Languages, Society and Policy; Cambridge Journal of Law, Politics, and Art; Cambridge Journal of Visual Culture; Journal of Trainee Teacher Educational Research; and Proceedings of the Cambridge Antiquarian Society. Interviews lasted approximately one hour and were audio-visually recorded to have an accurate record of the discussion. Interview questions and transcripts of the discussions will be uploaded onto the Cambridge institutional repository (Apollo) following approval from participants, and made publicly available, although video recordings will not be shared beyond the project team.

In this talk, we will present the preliminary analysis of the data which will allow us to understand why such projects exist, the hidden labour involved in their production and the support they require from across the library and beyond. In addition, we will summarise the findings and make recommendations around how universities can support the scholar- publisher ecosystem. The work will therefore contribute to the furthering of OR practices and deliver new approaches to community-led research. The analysis will also add to the growing literature on the political economy and affective nature of scholar-led publishing projects, which will support better comparison across higher education contexts.
How Open Access can disrupt the current system of assessment procedures and quality indicators for scholarly books: The case of the Croatian publishing landscape

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Academic books are objects of special value in the cycle of scholarly communication in the social sciences and humanities (SSH). This value can be assigned, described, and assessed by different actors in academia at different points in the communication process, in ways that tend to be more formal and objective but are also frequently based on complex, informal and subjective notions of quality.

The future of the book and its value are challenged from at least two perspectives. One is the changing understanding of book formats and, even in SSH, placing more value on diverse research outputs and bringing innovation into what constitutes a book (with a fluid boundary between book and non-book publications). The other important challenge is the financial sustainability of the book publishing system.

The best way to describe the current state of academic book publishing is to say that there is a great fragmentation and diversification at play, in all stages of the communication chain, from writing and producing to dissemination, preservation and evaluation. The expectations of involved actors change at a fast pace, but not equally across the different groups (geographical, generational, disciplinary, or related to epistemic cultures). These expectations for the evolution

of the book publishing system are in recent years significantly influenced by the principles and policies of Open Sciences (OS), which have so far become the dominant position of European institutions, both the policy-making bodies and the research funding agencies.

An important feature of the academic book publishing system has been recognised and can best be related to the concept of 'bibliodiversity' [1]. Aside from publishing at the international level (usually by big publishing companies), a significant body of knowledge is (and has been in the past) produced and circulated within smaller national and regional landscapes. Such country- specific ecosystems of academic book publishers are key to the survival of epistemic and linguistic plurality in research as well as its societal impact and relevance. Traditionally, many of these European national ecosystems have consisted of small and mid-sized publishers, public or private, often subsidised by public resources since market-based strategies have not been sufficient to enable their financial sustainability. In multiple ways, the financial sustainability of publishers was reliant on the value of the books they were publishing, as perceived and assessed by authors, reviewers, readers, libraries, funding agencies, and government bodies, or bodies performing research assessments.

The transition to Open Access (OA) is inevitable even for these small national landscapes; it is beneficial for both the authors and the audience and is often fostered by national OS policies. However, it can bring disruption into already fragile and vulnerable ecosystems, and this refers particularly to the countries that belong to the so-called scientific semi-periphery. While publishers will need to find ways to provide new services, better adjusted to the open circulation of knowledge, this will inevitably result in a changed understanding of what constitutes 'quality' and 'prestige' in book publishing, impact the ways in which books are evaluated and assessed, and have consequences on the publishers' sustainability.

In this paper, the Croatian academic book publishing landscape is used as an illustrative case for the aforementioned processes. The current context of the evaluation of books and book publishers is described, and the changes related to the transition to OA are outlined. Unlike in some of the previous research [2], we shall take into count only the evaluation and quality assessment aspects related to the books published by the national publishing houses, and not to the books authored by Croatian authors that were published by international publishers. However, it has to be noted that in all contexts of research performance assessments (of individuals, projects or institutions), international publishing venues are implicitly or explicitly preferred to domestic ones.

There are several stages in the publishing cycle in which publishers (or published book titles) are evaluated by different stakeholders. Although distinct, those stages are highly interrelated. The first one occurs when authors choose the publishers to which they submit their manuscripts. In Croatia, there is no established ranking list or quality labels of publishers. Therefore, the authors are guided by the criteria set out in the national regulations for scientific career advancement, but also by their informal perceptions of the 'prestige' of certain publishers (based on their previous experiences with editing and production practices, dominant opinions of their peer groups, and the success of the publishers in promotional activities, sales, and dissemination). Interestingly, those two guiding principles are often conflicted: while some private publishers are considered the most 'prestigious' among scholars, the formal promotion criteria give an advantage to books published by public academic institutions. This dynamic could change as authors are giving more importance to OA and online visibility of their books. It has been proven that compared to private publishers, public institutions (mostly university presses) are more ready to provide

publishing platforms that are open, interoperable, and conformant to the international best practices and standards [3].

The next stage of evaluation takes place at the selection of manuscripts that receive governmental subsidies at public annual calls: this assessment is performed by the appointed committee and relies on peer reviews and the past track records of publishers. OA is not a condition or an advantage in this process. Two other mechanisms to allocate public funding to publishers are the remuneration for public lending and the system of organised public purchase of books for libraries. Both mechanisms are based on the interest of library users for specific titles (similar to the so-called 'lib-citations') and indicate their value but are currently under- researched and not supported by transparent and publicly available data.

The final stage of book evaluation takes place when individual researchers, their projects or their institutions are assessed for career advancement, research grant awards, performance- based institutional funding or (re)accreditation of research organisations. While criteria for (re)accreditation have recently been revised (giving intense incentives for publishing in OA), the other three assessment systems are currently being modified. It is not yet fully clear how important the criteria of openness will be and to what extent it will also apply to academic books.

In 2023, the Ministry of Science and Education appointed the Croatian Open Science Cloud Initiative to draft the Croatian Open Science Plan [4]. Its main goals include reforming the research assessment system by avoiding the use of inappropriate indicators, and by introducing new indicators and criteria that would recognize contributions to OS as well as encouraging and providing OA to publications and all other research results, especially those financed with public funds. When it comes to academic books, the Plan aims to define business models and build e- infrastructure that will support book publishing in OA. The Plan was submitted to the Ministry, but it has not yet been officially adopted. Once it is accepted, it might have a strong fostering effect on the assessment practices, institutional policies, and the behaviour of individual researchers.

In anticipation of the forthcoming changes, the new Croatian Initiative for Open Scholarly Books has been launched to help and foster this transition. While recognising that OA can offer new opportunities to book authors and publishers, it can also question traditional values and disrupt the existing system.

### REFERENCES

Giménez-Toledo, E., Kulczycki, E., Pölönen, J., & Sivertsen, G. (2019). Bibliodiversity – What it is and why it is essential to creating situated knowledge. Impact of Social Sciences.

https://blogs.lse.ac.uk/impactofsocialsciences/2019/12/05/bibliodiversity-what-it-isand-why-it-is-essential-to-creating-situated-knowledge/ Giménez-Toledo, E., Mañana-Rodríguez, J., Engels, T. C. E., Guns, R., Kulczycki, E., Ochsner, M., Pölönen, J., Sivertsen, G., & Zuccala, A. A. (2019). Taking scholarly books into account, part II: A comparison of 19 European countries in evaluation and funding. Scientometrics, 118(1), 233–251. <u>https://doi.org/10.1007/s11192–018–2956–7</u>

Melinščak Zlodi, I. (2023). The Landscape of Scholarly Book Publishing in Croatia: Finding Pathways for Viable Open Access Models. Publications, 11(1), 17. https://doi.org/10.3390/publications11010017

Prijedlog Hrvatskog plana za otvorenu znanost. (2023). Vijeće Inicijative za HR-OOZ. https://wiki.srce.hr/download/attachments/126714265/Hrvatski\_plan\_za\_otvorenu\_zn anost12\_travnja\_2023\_lekt\_20230424v3.pdf?version=1&modificationDate=168 2495502000&api=v2

# **DAY 2** SESSION 4.2 / Evaluation in Practice



## Funding Acknowledgements and Concentration in the Social Sciences and Humanities: "A Tale of Two Unis"

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Research evaluation specialists have long been interested in differences between funded versus non-funded research. Not all research projects will be funded, yet academics still work towards this goal regardless of known success percentages/odds. Funding instruments are regarded as necessary to legitimize a specific research area and generate impact. If a funding instrument is too prescriptive, too challenging or competitive, researchers may forgo the grant opportunity. Others might take a different approach, which is to 'sell out' and convert their interests towards topics that are more fundable (Altbach, 2001). Research consistently shows that prominent topics receive far more funding per researcher than topics that are not prominent (Klayvans & Boyak, 2017). For example, in Quebec Canada a high proportion of funding is allocated to the engineering and natural sciences. In Denmark, topics in the biological sciences and clinical medical research are well-funded (Madsen & Aagaard, 2020)

Most bibliometric studies concerning funding systems have examined the relationship between funding and citations or funding and publication performance (e.g., Jowkar et al., 2011; Langfeldt et al., 2015; Leydesdorff et al., 2019; Mosleh et al., 2022; Yan et al., 2018; Zhao, 2010). An increase in the indexing of funding acknowledgements has enabled this. In the Web of Science few acknowledgements were indexed prior to 2009 (Paul-Hus et al., 2016). After 2009 the level of completeness rose to approximately 88%, or 12% incomplete (Álvarez-Bornstein et al., 2017; Liu et al., 2020; Mosleh et al., 2022). The Scopus database has been publicised for being even more complete in terms of funding acknowledgement data (Baas et al., 2020); however, comparative tests of accuracy, in the medical sciences, have shown that the largest portion of articles with funding information were found in the Web of Science (29.0%), followed by PubMed (14.6%) and Scopus (7.7%). (Kokol et al., 2018). For Scopus expressly, Liu (2020) has suggested that Elsevier optimize its funding text identification method, as well as its funding agency extraction and standardization strategy.

In the science policy literature, a critical if not 'contentious' issue is degree of funding concentration. Again, funding tends to converge around specific scientific topics, but it is also unequally distributed across individuals. Individuals are forced to be hypercompetitive on what has become a "damaging path towards diminished diversity" (Madsen & Aargaard, 2020, p. 1159). Many researchers with similar credentials will experience different levels of success. When early funding increases

an individual's chance of obtaining future funding, this is called a "Matthew Effect" (Bol et al., 2018; Merton, 1968), and if a researcher's degree of output does grow or correspond with a more substantial level of funding, there is a risk of "diminishing marginal returns" (Mongeon et al., 2016; Wahls, 2018).

Data used to investigate the "Mathew Effect" is often collected from individual funders (Bol et al., 2018; Ma et al., 2015). In The Netherlands, Bol et al. (2018) examined the Netherlands NWO-Innovation Research Incentives scheme and discovered that winners just above the NWO's funding threshold went on to accumulate more than twice as much funding than non-winners, across eight subsequent years. A more comprehensive analysis, based on multiple sources of funding in Denmark, points to a "strongly skewed allocation towards a small elite of individual researchers, and towards a select group of research areas and topics. (Madsen & Aagaard 2020, p. 1159).

Upon reviewing both the metric and science-policy literature, newer efforts could be made to examine funding acknowledgements and concentration in the Social Sciences and Humanities. In Quebec, Canada, Lariviere et al., (2010) found that there has been a high level of concentration in these fields. But, as Aagard et al. (2020) suggest, empirical-based studies are 'still in their infancy', and there are key reasons for this.

Data are difficult to compile, and open access would make the process much easier. It is not always possible to obtain detailed information directly from a government or private funding source, and only certain types of information are indexed in the Web of Science, Scopus, and now the new Dimensions database. To date, Open Alex is the only 'open' resource; however, research concerning funding concentration is not especially meaningful unless funding acknowledgement data are detailed, standardized and accurately linked to their individual recipients and coauthors.

This study evaluates the funding details acknowledged in research articles, published in the SSH with at least one author affiliated with the *University of Copenhagen* or with the *University of Toronto*. For practical purposes, we have chosen to work with data extracted from Elsevier's' Scopus. It is a comparative analysis, and the objective is to:

- a) Establish a history of Scopus-indexed funding acknowledgements for the two universities.
- b) Determine the proportion of authors benefitting from acknowledged funding sources.
- c) Produce a concentration-of-funded-article analysis at the level of the author IDs.
- d) Examine article-level co-funding relationships between different funding sources.

There is value in conducting this type of investigation at an institutional level. Universities generally have policies concerning funding with respect to external sources. For example, if a department is operating on a small budget, it might be a concern about whether (or not) the external funding source will cover overhead costs for a project. Different universities also have different rules for an academic who obtains external funding and wants to 'buy out' some time from teaching. Researchers who attract external funding are generally perceived as 'stars'; consequently the 'stars' are often expected to, if not under pressure to bring in further funding. Researchers who are less successful might be encouraged to keep trying: it is just a matter of 'when' and not 'if'. Yet, if funding concentration (as per the 'Matthew effect) is a widespread problem, research findings pertaining to the Social Sciences and Humanities is potentially similar for many universities, particularly those in developed countries. According to Aagaard & Madsen (2020), there are "benefits and drawbacks to concentrating research funds on fewer individuals and groups" (p. 117). Thus, knowing where and to what degree funding concentration is occurring might help university administrators to reflect more on what 'diversity' means, particularly with respect to hiring decisions, tenure, teaching hours, career satisfaction, and/or growth potential in their academic systems.

### REFERENCES

Aagaard, K., Nielsen, M. W., & Kladakis, A. (2020). Concentration or dispersal of research funding? Quantitative Science Studies, 1(1), 117–149. DOI: 10.1162/qss\_a\_00002

Altbach, P. G. (2001). Academic freedom: International realities and challenges. Higher Education, 41(1/2), 205-2019. <u>http://www.jstor.org/stable/3448125</u>.

Álvarez-Bornstein, B., Morillo, F. & Bordons, M. (2017). Funding acknowledgments in the Web of Science: completeness and accuracy of collected data. Scientometrics, 112, 1793–1812. DOI: 10.1007/s11192-017-2453-4

Bol, T., de Vaan, M., & van de Rijt, A. (2018). The Matthew effect in science funding. Proceedings of the National Academy of Sciences, 115(19), 4887–4890. DOI: 10.1073/pnas.1719557115

Edwards, R. (13 August 2020). Unfunded research: why academics do it and its unvalued contribution to the impact agenda. LSE Impact Blog. Available at: <a href="https://blogs.lse.ac.uk/impactofsocialsciences/2020/08/13/unfunded-research-why-academics-do-it-and-its-unvalued-contribution-to-the-impact-agenda/">https://blogs.lse.ac.uk/impactofsocialsciences/2020/08/13/unfunded-research-why-academics-do-it-and-its-unvalued-contribution-to-the-impact-agenda/</a>

Jowkar, A., Didegah, F., & Gazni, A. (2011). The effect of funding on academic research impact: a case study of Iranian publications. ASLIB Proceedings, 63(6), 593-602. DOI: 0.1108/0001253111187243

Klavans, R. & Boyack, K.W. (2017). Research portfolio analysis and topic prominence, Journal of Informetrics, 11(4), 1158-1174. DOI: 10.1016/j.joi.2017.10.002.

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Kokol, P.; Blažun Vošner, H. (2018). Discrepancies among Scopus, Web of Science, and PubMed Coverage of Funding Information in Medical Journal Articles. Journal of the Medical Library Association, 106(1), 81–86. DOI: 10.5195/jmla.2018.181

Langfeldt, L., Bloch, C.W., & Sivertsen, G. (2015). Options and limitations in measuring the impact of research grants—evidence from Denmark and Norway. Research Evaluation, 24(3), 256–270. DOI: 10.1093/reseval/rvv012.

Larivière, V., Macaluso, B., Archambault, É., & Gingras, Y. (2010). Which scientific elites? On the concentration of research funds, publications and citations. Research Evaluation, 19(1), 45–53. DOI: 10.3152/095820210X492495.

Leydesdorff, L., Bornmann, L., & Wagner, C. S. (2019). The relative influences of government funding and international collaboration on citation impact. Journal of the Association for Information Science and Technology, 70(2). DOI: 10.1002/asi.24109.

Liu, W. (2020). Accuracy of Funding Information in Scopus: A Comparative Case Study. Scientometrics, 124, 803–811. DOI: 10.1007/s11192–020–03458-w.

Liu, W., Tang, L. & Hu, G. (2020). Funding information in Web of Science: an updated overview. Scientometrics, 122, 1509–1524. DOI:10.1007/s11192-020-03362-3

Ma, A., Mondragón, R. J., & Latora, V. (2015). Anatomy of funded research in science. Proceedings of the National Academy of Sciences, 112(48), DOI: 10.1073/pnas.1513651112

Madsen, E. B., & Aagaard, K. (2020). Concentration of Danish research funding on individual researchers and research topics: Patterns and potential drivers. Quantitative Science Studies, 1(3), 1159–1181. DOI: 10.1162/ qss\_a\_00077

Merton, R.K. (1968). The Matthew effect in science: The reward and communication systems of science are considered. Science, 159, 56–63.

Mongeon, P., Brodeur, C., Beaudry, C., & Larivière, V. (2016). Concentration of research funding leads to decreasing marginal returns. Research Evaluation, 25(4), 396–404. DOI: 10.1093/reseval/rvw007.

Mosleh, M., Roshani, S. & Coccia, M. (2022). Scientific laws of research funding to support citations and diffusion of knowledge in life science. Scientometrics, 127, 1931–1951. DOI: 10.1007/s11192-022-04300-1

Paul-Hus, A., Desrochers, N., & Costas, R. (2016). Characterization, description, and considerations for the use of funding acknowledgement data in Web of Science. Scientometrics, 108, 167–182. DOI: 10.1007/s11192-016-1953-y.

Yan, E., Wu, C. & Song, M. (2018). The funding factor: a cross-disciplinary examination of the association between research funding and citation impact. Scientometrics, 115, 369–384 DOI: 10.1007/s11192-017-2583-8.

Wahls, W. P. (2018). The NIH must reduce disparities in funding to maximize its return on

investments from taxpayers. ELife, 7, 1–9. DOI: 10.7554/eLife.34965.

Zhao, D. (2010). Characteristics and impact of grant-funded research: a case study of the

library and information science field. *Scientometrics, 84(2),* 293-306.DOI: 10.1007/s11192-010-0191-y.

### Putting Our Platform to Work: Debating Responsible Research Assessment and 'Societal Impact' in the Japanese University System

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Japan is a late comer to the debate on Responsible Research Assessment (RRA). Policy makers have begun to perceive that Japanese research capability is in decline based on the reduced growth rate of journal publications by Japanese scholars. These perceptions about a decline have resulted in the increased emphasis on metric-based approaches. The relative invisibility of Japanese social sciences and humanities (SSH) research in commonly used bibliometric databases such as Web of Science and Scopus has probably been a key driver for a turn towards the quantitative measurement of SSH research output. That is, SSH researchers are compelled towards quantitatively demonstrating their research output. On the other hand, some argue that this measurement by numbers may be inevitable and yet challenging given that there is no domestic citation index for SSH research output in the Japanese language, unlike in China, Korea or in Taiwan.

It is in this context that the Science Council of Japan issued a recommendation that raised fresh questions about the use of metrics, especially for determining procedures for resource allocation. These concerns about metrics, assessments and goal setting have understandably seen an increased interest in the various issues linked to research evaluation. Gradually but steadily, the RRA agenda is gaining support. In September 2021 out of the more than 2,600 organizations that signed DORA, Japanese signers were only three. After a year, the number increased to ten. In 2023, the University of Tokyo became the first signing university in Japan, but it remains to be the only university among 17 signatories from Japan. For the Japanese academic community, the research assessment exercise therefore is being

determined by policy compulsion rather than arising from a critical engagement with the research and academic environments.

The Japan Inter-institutional Network for Social Sciences, Humanities and Arts (JINSHA), has taken the lead in incubating discussions on research evaluation exercises in SSH research since 2014. It is a network of University Research Administrators (URAs) of 13 universities working closely with research and researchers in SSH fields. More recently, the responsible metrics and the RRA have been key instrumental ideas that the network had taken up in various seminars and workshops to create a forum for continuous discussions and dialogues.

Building on the ongoing discussions and information accumulated so far, how can we move forward to the practice of RRA? To take up this challenge, some members of JINSHA took initiatives in creating a visually appealing "map" of the key issues and information regarding research assessment with the help of DORA Community Grant. The aim was to build common grounds to discuss how far we can develop credible assessment exercises, while avoiding the repetition of the same arguments. By addressing gaps in existing knowledge and awareness on research assessment issues, we also intended to encourage URAs and stakeholders to discuss how practical measures can be adopted to enable the implementation of RRA.

This paper examines the issues and challenges that have been raised in the research assessment mapping exercises and discusses the prospects for upgrading the map as well as responding to current policy demands for introducing 'societal impact' in the research assessment system. Taking advantage of the new report published by the Science Council of Japan titled 'Societal Impact of Research in the Humanities and Social Sciences: An Examination of Evaluation Based on Case Studies' (2023) this paper aims to propose several practical points that should be incorporated in the new assessment system of societal impact. In doing so, it will also identify the role of research managers and URAs in sustaining and enriching diversity of the research ecosystem while taking initiatives for promoting SSH research.

### The Future of Peer Review in SSH: Insights from the MetaROR Project

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Peer review plays a vital role in maintaining the quality and integrity of scholarly research (Publons, 2018). While it engages field experts in assessing the validity, significance, and originality of manuscripts before publication, it is also essential for the process to adjust to the distinct features and evaluative contexts of various disciplines (Ochsner, Kancewicz-Hoffman, Hołowiecki, & Holm, 2020). Despite its role in upholding academic standards, the process faces challenges and is subject to controversy. Lee, Sugimoto, Zhang, & Cronin (2013), for example, note that while peer review aims for impartiality, the process is surrounded by claims that it may be subject to biases related to the nationality, gender, and career stage of authors and reviewers. However, the extent and impact of these biases on research are not definitively established and are often based on speculative assumptions.

Some well-known strategies are commonly used to mitigate potential biases in peer review, such as double-blind review, where both the authors and the reviewers are anonymous. However, its effectiveness is still debated (Baccini & De Nicolao, 2016). Furthermore, the peer review process is surrounded not only by inherent conceptual challenges but also by practical impediments. A primary concern is the recruitment of suitable reviewers who are not only subject matter experts but also prepared to provide detailed and constructive feedback. This issue is intensified by the increasing demands and time constraints on academics, reducing both the availability and quality of reviewers and reviews (Ware, 2008). This situation is exacerbated by the rapid growth of scholarly publications, stretching the peer review system to its limits (Tennant et al., 2017).

In response to issues like those presented here, there is an increasing interest in open peer view models with critical features such as the potential disclosure of reviewer identities, the publication of review reports, and, in some cases, the participation of the broader community in the review process. The rationale behind open peer review is to improve the accountability, fairness, and quality of the review process alongside articles (Ross-Hellauer, 2017). oponents argue that this transparency helps mitigate biases and conflicts of interest, fostering a more constructive and collaborative dialogue between authors and reviewers (Ford, 2013). However, the adoption of open peer review is not without challenges. Concerns include the potential for reviewer reluctance due to fears of retribution or damaged relationships, especially in smaller research communities where anonymity can be crucial for candid feedback (Warne, 2016).

Despite these concerns, evidence indicates that open peer reviews are generally more constructive and courteous, often exceeding the quality of traditional blind reviews (Ford, E., 2013). Open reviews can also accelerate and improve the transparency of the editorial process, thus enhancing trust in published research (Tennant, J.P., et al., 2017). However, a valuable benefit for the system is the potential for these reviews to become more integral to reward and recognition strategies.

Traditionally, peer review has been viewed as a voluntary, selfless contribution to the scholarly community. These contributions are rarely considered in academic promotion or funding decisions, and this lack of formal recognition and reward has been a point of contention (Sizo, Lino, Reis, & Rocha, 2019). This imbalance has led to calls for a more systematic approach to acknowledging reviewers' work, such as including peer review activities in academic CVs, providing certificates or public acknowledgements, and even financial compensation (Nicholas et al., 2015). In this context, the role of digital platforms is instrumental in facilitating the open peer review process.

The MetaResearch Open Review (MetaROR) platform has been developed to address some of the mentioned challenges by implementing an open peer review approach based on the publish- review-curate model. This model, which is increasingly popular in life sciences and is adopted by journals such as eLife and F1000 Research, unfolds in three stages. Initially, authors publish their scholarly work on a preprint server like SocArXiv or OSF Preprints. They can then submit their work for review on a platform like MetaROR. Here, volunteer editors perform initial screenings and match submissions with suitable reviewers. The platform then publishes the review reports and potentially the reviewers' identities, linking them to the corresponding preprint articles. The process culminates with MetaROR providing an editorial assessment that includes a summary, contextualisation, and a discussion of the review reports, thereby fulfilling the 'curate' component of the model (Wolfgang Kaltenbrunner et al., 2023).

Once the review cycle is complete, authors can decide whether they will revise their work and whether an improved preprint should be submitted for a second round of reviews. In any case, the reviews and editorial assessment receive their individual DOIs, identifying the contributions to the publishing process as measurable and valuable research outputs.

Furthermore, opting to have their work reviewed with MetaROR does not prevent authors from submitting their now-reviewed preprints to conventional journals. Journals will be able to use existing reviews to subsidise their own editorial decision, speeding up the publishing process through more efficient peer review. Similarly, the visibility and openness of the process may also increase the recognition of reviewers, potentially making peer review a more attractive task for researchers. In conclusion, the MetaResearch Open Review (MetaROR) platform is strategically designed to contribute significantly to the ongoing evolution of peer review. Recognising the value of community-specific norms and research practices, the development team continues to build and refine this platform, inviting insightful ideas and suggestions that are invaluable to shaping it into an effective tool tailored to the specific needs of SSH research. Given the focus of this year's RESSH Conference on evaluation, infrastructure, and practices in open research, the event presents an ideal opportunity to introduce a pilot of MetaROR. Here, we aim to gather valuable insights from the SSH community, ensuring that the platform meets and surpasses the diverse expectations and standards of the multifaceted fields within MetaResearch.

### REFERENCES

Baccini, A., & De Nicolao, G. (2016). Do they agree? Bibliometric evaluation versus informed peer review in the Italian research assessment exercise. Scientometrics, 108(3), 1651–1671. <u>https://doi.org/10.1007/s11192-016-1929-y</u>

Ford, E. (2013). Defining and Characterizing Open Peer Review: A Review of the Literature. *Journal of Scholarly Publishing*, *44*(4), 311–326. https://doi.org/10.3138/jsp.44-4-001

Lee, C. J., Sugimoto, C. R., Zhang, G., & Cronin, B. (2013). Bias in peer review. Journal of the American Society for Information Science and Technology, 64(1), 2–17. https://doi.org/10.1002/asi.22784

Nicholas, D., Watkinson, A., Jamali, H. R., Herman, E., Tenopir, C., Volentine, R., ... Levine, K. (2015). Peer review: Still king in the digital age. Learned Publishing, 28(1), 15–21. <u>https://doi.org/10.1087/20150104</u>

### Intertextual Reading by Artificial Intelligence for Use in Research Assessment in the SSH

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The use of large language models (LLMs) in machine learning is interesting from an SSH perspective. New documents are created in an interplay with large corpuses of previous documents in a way that recalls the literary theories of intertextuality by Julia Kristeva (1969) and palimpsests by Gérard Genette (1982). Of more acute interest is the fact that the same AI technologies are increasingly used to support assessment of research publications and proposals for funding (Thelwall et al., 2023, Holm et al., 2022). In our presentation, we will focus on textual features of research publications and proposals for funding opportunities and challenges of using AI to create models based on these features that may serve as heuristics in the evaluation processes.

To build an AI-model, developers typically go through a series of steps starting with collecting historical data on the phenomenon to be modelled (publications or proposals), then extracting relevant features from the data (textual features, structural features, and possibly metadata like co-authorship and citations). And finally, based on the collected data, AI-models can be trained to make predictions relevant for the assessment of new publications or proposals, e.g. assigning publications and proposals to disciplines, checking proposals for completeness, similarity with past proposals, etc.

At each of these steps, Al-developers make choices that will affect the working of the model. According to good practice in Al-development, these choices should be documented to assure transparency and accountability (Mitchell et al. 2019; Gebru et al. 2021). On the other side, there is a clear expectation in recent policy documents for research assessment processes to be open for inspection and input from the communities of researchers that are subject to the evaluation. See among others the Agreement on the reform of research assessment, 7th commitment (CoARA, 2022). Even if Al-models are not used for predicting the actual outcome of an assessment, the application of such models may indirectly affect the assessment outcome when used to suggest a specific grouping of proposals or to indicate possible reviews for a research paper. In cases where research assessment processes are supported by Al-models, real participation from the community of researchers would thus be difficult without a working understanding of the functions of the AI- models employed.

Furthermore, disciplines within the social sciences and humanities (SSH) boast a larger variation of textual practices within and across disciplines. Sivertsen (2022) demonstrates the variation in the social sciences. The multitude of written genres in the SSH makes it more challenging to use bibliometric indicators to support the assessment of the disciplines (Sivertsen, 2014; Ochsner et al., 2016; Engels & Kulczycki, 2022). In this paper presentation we will also go beyond explicit requirements set for academic genres, by investigating how AI-models might be used to discover textual and structural characteristics of academic texts in general and specifically within SSH. Our aim is to discuss how Natural Language Processing and other AI-methods may add to our understanding of the disciplinary variation in textual conventions, and how to take this variation into consideration in the context of research assessment.

Large language models (LLMs) present a specific case of Natural Language Processing. While these models are trained on an extremely large and varied corpus of text, they may also be fine-tuned to recognize specific research disciplines based on a representative set of scholarly texts. According to the universal approximation theorem, LLMs may be trained to represent any scientific genre. There may therefore be opportunities for developing AI-models that are able to predict whether a given scholarly text is congruent with a disciplinary standard. Such AI-models could be used for both classification and producing evaluation heuristics.

We will raise the following research questions for discussion at the conference while inviting other relevant questions from the audience, thereby gathering input to further research on the use of AI in SSH evaluations and to developing guidelines for research funders:

- Is there an existing set of textual features for any research discipline which is sufficient to identify the same discipline by using Al?
- Could specific aspects of research quality such as originality, solidity and relevance be conceptualized as textual features?
- Under what conditions can AI models support research assessment in a meaningful and transparent way – and how could the community of SSHscholars participate in defining these conditions?

### REFERENCES

CoARA. (2022.) Agreement on the reform of research assessment. https://coara.eu/app/uploads/2022/09/2022\_07\_19\_rra\_agreement\_final.pdf

Engels T. et Kulczycki E. editors (2022). Handbook on Research Assessment in the Social Sciences. Edited volume. Edward Elgar 2022

Gebru, T. et al. (2021). Datasheets for datasets. Communications of the ACM, 64(12), pp.86–92. <u>https://dl.acm.org/doi/10.1145/3458723</u>

Genette, G. (1982). Palimpsestes: La littérature au second degré. Éditions du Seuil, Paris.

Holm J et al. (2022). Good practice in the use of machine learning & Al by research funding organisations: insights from a workshop series. Research on Research Institute. Report. <u>https://doi.org/10.6084/m9.figshare.21710015.vl</u>

Kristeva J. (1969.) Semiotike: recherches pour une semanalyse. Éditions du Seuil, Paris.

Mitchell, M. et al. (2019). Model cards for model reporting. In Proceedings of the conference on fairness, accountability, and transparency (pp. 220-229). <u>https://doi.org/10.48550/arXiv.1810.03993</u>

Ochsner et al. editors (2016) Research Assessment in the Humanities. Towards Criteria and Procedures. Edited volume. Springer Nature 2016. <u>http://library.oapen.org/handle/20.500.12657/22952</u>

Sivertsen, G. (2014). Scholarly publication patterns in the social sciences and humanities and their coverage in Scopus and Web of Science. In Noyons, E. (Ed.), Proceedings of the science and technology indicators conference 2014, Leiden (pp. 598-604). Leiden: Universiteit Leiden – CWTS.

Sivertsen, G. (2022.). Chapter 16: Publishing in the social sciences and its representation in research evaluation and funding systems. In Engels, T.C.E & Kulczycki, E. (Eds.), Handbook on Research Assessment in the Social Sciences (pp. 238–261). Cheltenham: Edward Elgar Publishing.

Thelwall, M. et al. (2023). Predicting article quality scores with machine learning: The U.K. Research Excellence Framework. Quantitative Science Studies, 4(2), 547–573. https://doi.org/10.1162/qss\_a\_00258

# DAY 2 SESSION 5.1 / Policy

## Improving The Integration of The Social Sciences, Arts and Humanities into Evidence-Informed Policymaking Ecosystems

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#### Aziz Naji Belspo (Belgian Science Policy)

As part of the political programme of the Belgian Presidency of the Council of the European Union and under the coordination of the Belgian Federal Science Policy (Belspo), a high level conference will be dedicated, on 6 and 7 May 2024, to the discussion of the unique assets of the social sciences, arts and humanities (SSAH) in regard to the provision of multidisciplinary evidence to policymakers. Indeed policymakers, at national and European level, face unprecedented challenges, sometimes referred as "wicked problems" – like pandemics, migration, climate change or transition to green and digital technologies –, that demand unparalleled levels of multidisciplinary scientific knowledge and expertise as well as the involvement of collaborative efforts across disciplines and with a diversity of stakeholders, including citizens, civil society and industry.

The need to dedicate a Presidency conference to this topic comes from the recognition of a paradox within current research policies. On the one hand literature indicates that SSAH can benefit STEM disciplines and are critical for good policy development. SSAH even play a disproportionately significant role in informing policy, and consistently deliver for governments when developing evidence-informed policy (Wilsdon et al., 2024). The diverse expertise SSAH researchers offer to policymakers has also been underlined, particularly in reframing issues in a human-centric perspective, developing ethical considerations and understanding complex societal dynamics (Baptista et al., 2020). On the other hand, SSAH integration to the resolution of wicked problems, together with STEM disciplines, remain underexplored, with STEM disciplines traditionally dominating multidisciplinary efforts (EASSH, 2022). Historically, SSAH researchers have often been relegated to peripheral roles in multidisciplinary programmes, such as assessing public acceptability of innovation or disseminating research findings into society.

The connection between science and policy within evidence informed policymaking (EIPM) ecosystems is not to be taken for granted, especially concerning the SSAH. Indeed the various actors engaged in EIPM possess different cultures, languages, work methodologies, and objectives, operating at varying speeds. Consequently, each stakeholder involved in the EIPM framework adheres to their own values, professional standards, and notions of what constitutes robust research or effective

policy formulation. Furthermore there's a prevailing sentiment within SSAH research communities that the evidence SSAH scholars offer is frequently disregarded or subjected to unwarranted scepticism regarding its reliability (Stoker G., & Evans M., 2016).

Policymakers in turn consider multiple relevant factors beyond scientific evidence such as political, social, economic or ethical ones. The advisory role of science has therefore sparked intense academic debates since the mid-2010s (Thoni Th., & Livingston J.E., 2019), which have gained renewed attention in the era of "post-truth politics" characterized by a growing distrust in expertise and a shift in how information is communicated to the public (Lewandowsky, S., Ecker, U. K. H., & Cook, J., 2017). In this regard, public scepticism toward scientific evidence may particularly clash with SSAH scholars' perception of research's societal role. Research indicates indeed that SSAH academics tend to exhibit a "rationalistic bias" (Rich R.F., 2001), (wrongly) believing that acquiring evidence automatically leads to its utilization and subsequently improves policies. Challenging issues that will be discussed at the Presidency conference include thus the difficulties of maintaining the objectivity of scientific evidence amidst the influence of the other factors that are relevant for policymakers (how much should those other factors affect scientific findings without compromising their objectivity?) and preserving the impartiality and autonomy of SSAH scientists in the policy-making process (should they merely inform policymakers or also provide recommendations, risking partiality and normative engagement?) (Montushi, E., 2016).

### POLICY BRIEF

The presentation at RESSH 2024 will be the occasion to present and discuss with RESSH attendees the main outcomes of the conference, notably its resulting policy brief that aims at proposing to researchers, brokers and policymakers empirically based recommendations relating to: 1) the production by SSAH researchers and the uptake by policymakers of multidisciplinary evidence; 2) the professionalization of multidisciplinary EIPM ecosystems through mutual recognition of all the actors involved therein, as well as 3) the promotion of technologically and socially innovative ways to better integrate SSAH expertise into the production of policy relevant scientific evidence.

The presentation will specifically elaborate on the role of research evaluation as an important element of the professionalization of future EIPM ecosystems, as well as of the further integration of SSAH scholars therein. In particular, the need to better consider the impact of SSAH researchers on policymaking in the framework of current initiatives like CoARA (the coalition for Advancing Research Assessment) will be debated. Finally, on the basis of the outcomes of the conference debates, criteria will be proposed to evaluate and reward the contribution of SSAH research to EIPM, at individual as well as collective level.

### REFERENCES

Baptista, B. V., Fletcher, I., Maryl, M., Wciślik, P., Buchner, A., Lyall, C., ... & Schriber, L. (2020). Final report on understandings of interdisciplinary and transdisciplinary research and factors of success and failure.

EASSH (2022). SSH Integration in Horizon Europe and its Missions.

Lewandowsky, S., Ecker, U. K. H., & Cook, J. (2017). Beyond misinformation: Understanding and coping with the "post-truth" era. Journal of Applied Research in Memory and Cognition, 6(4), 353–369.

Montushi E. (2016), Using science, making policy: what should we worry about? European Journal for Philosophy of Science, 7, 57-78.

Rich R.F., (2001), Social science information and public policy making. Routledge.

Stoker G., Evans M. (2016), Evidence-based policy making in the social sciences: methods that matter. In Evidence-Based Policy Making in the Social Sciences (pp. 15-28). Policy Press.

Thoni, T., & Livingston, J. E. (2021). Going beyond science-policy interaction? An analysis of views among intergovernmental panel on climate change actors. Critical Policy Studies, 15(1), 37-54.

Wilsdon, J., Weber-Boer, K., Wastl, J., & Bridges, E. (2024). Reimagining the Recipe for Research and Innovation: The Secret Sauce of Social Science.

## From Output to Research Culture: Shifting the Focus In Research Evaluation and Governance

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Not only the humanities and social sciences, but also other disciplines are too often ignored in research evaluation and in science policy. They are not considered in their own research logic and their epistemic conditions. In particular, higher education policy based on research performance indicators often tends towards a one-sizefits-all solution without the necessary differentiation and recognition of various research contexts. This leads to unintended effects in those research cultures that cannot easily adapt to new science policy imperatives management objectives. Such unintended effects range from mere defensiveness/reactance to gaming the indicators to cheating to the deformation of research practices and research topics.

In recent years, metrics-based approaches to research evaluation have been heavily criticized and various solutions have been proposed. These range from the further improvement of indicators and more standardization, transparency and openness of research information (e.g. Barcelona Declaration), to the responsible use of metrics (Hicks et al. 2015, Wilsdon, 2016) and greater consideration of qualitative methods (CoARA, 2022). Others question research evaluation entirely (Hallonsten, 2021). New Zealand recently abolished its research quality evaluation and the associated collection of research information because the effort and return of the evaluation are not in proportion (Ross, 2024). After an initial change in practices, hardly any improvements have been seen recently (ibid.)

We take the view that research information should not be condemned in general, but that the question should be asked: What information (and indicators) is collected for what purpose. A neoliberal management perspective of comparison and competition is misleading, as it is only aligned to the improvement or even maximization of output variables. What is overlooked are the conditions under which the output is created, the research practices and the respective research environment. This also leaves invisible how the "desired" output is generated by the researchers and at what costs on another, unmeasured side.

The conceptual paper contrasts the output-oriented evaluation approach with an alternative approach that makes research cultures the object of monitoring. Research cultures are understood as a holistic concept that encompasses attitudes, motives, meanings and practices that are seen as shared by individuals in the same context (e.g. small cultures, Holliday 1995). Research cultures have an epistemic dimension

that refers to the subject-specific nature of knowledge and knowledge production. But they also have an organizational and local dimension that determines the formation of specific practices. Making research cultures themselves the subject of evaluation means taking all these different aspects simultaneously into consideration and not just the specific management objectives. By shifting the focus from output to research cultures, many unintended effects could be detected and perhaps avoided.

Furthermore, it opens up the possibility of taking a closer look at the research environment, including the conditions whose design is the actual task of university management and science policy. It should be a step on the way to evaluating research conditions through a deeper understanding of research cultures. What are good conditions for different research cultures? This does not mean that the output is neglected, on the contrary: The assumption is that the quantitative and qualitative results "emerge" from the research cultures. We strive for a conceptualization of research cultures and practices as structures that create outcomes in a nondeterministic, but rather probabilistic sense.

It will be shown how we are following this path with the design of the Berlin Science Survey and make some facets of research cultures measurable and fruitful as research information for evaluation purposes. At the same time, this represents a reflexive and participatory evaluation approach that strongly involves the researchers and trusts their everyday experiences and assessments.

### REFERENCES

Barcelona Declaration on Open Research Information. <u>https://doi.org/10.5281/zenodo.10958522</u>

CoARA (2022). Agreement on Reforming Research Assessment. <u>https://coara.eu/agreement/the-agreement-full-text</u>

Hallonsten, O. (2021). Stop evaluating science: A historical-sociological argument. Social Science Information, 60(1), 7-26. <u>https://doi.org/10.1177/0539018421992204</u>

Hicks, D., Wouters, P., Waltman, L. et al. (2015). Bibliometrics: The Leiden Manifesto for research metrics. Nature 520, 429–431. <u>https://doi.org/10.1038/520429a</u>

Holliday, A (1995) Small Cultures. *Applied Linguistics* 20(2): 237–264.

Ross, J. (2024, April 9). New Zealand cancels research quality evaluation <u>https://www.timeshighereducation.com/news/new-zealand-cancels-research-</u> <u>quality-evaluation</u>

Wilsdon, J. et al. (2016). *The Metric Tide: Independent Review of the Role of Metrics in Research Assessment and Management*. Sage.

The Secret Sauce of Social Science: Assessing, Articulating and Advocating for the Impacts of SSH Research in National Systems of R&D

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The menu of available methods and metrics for assessing the diverse qualities and impacts of SSH research within national R&D systems has expanded considerably over the past decade. Yet it can still be challenging to articulate these in ways that are persuasive and compelling to policymakers, research funders and wider society. STEM disciplines are often more successful in making their case, and benefit further from the application of predominantly STEM framings and models across the wider R&D landscape.

Drawing on his experiences as chair of the UK's Campaign for Social Science (from 2013 to 2018) and on a new study (published in January 2024), James Wilsdon will present a series of insights into how we can sharpen how we assess, articulate and advocate for the myriad impacts and contributions of SSH research.

Based on fresh data from Digital Science, the paper will highlight four ways in which SSH research acts as a 'secret sauce' in wider recipes for R&D -- adding depth, complexity and richness, and drawing out other ingredients and flavours.

First, SSH research enables whole systems thinking. It helps innovators, entrepreneurs and decision-makers to understand broader system capabilities and dynamics — including how economies and institutions function, and the place of productivity, skills, training and organisational culture.

Second, SSH research is vital for good policy development. Around 3 per cent of publications supported by STEM-related research grants in the UK end up being cited in policy documents. This rises to 6 per cent of publications supported by social science-related grants and 7.5 per cent of publications from grants that can be characterised as interdisciplinary.

Third, SSH research underpins smart and responsible innovation. New and emerging technologies depend upon SSH evidence and expertise for the legal, regulatory and ethical frameworks that are essential for them to advance in ways that maximise their opportunities, safeguard against risks, and protect the vulnerable.

Finally, SSH research is essential to international collaboration and the capacity of national R&D systems to address shared challenges, including the UN's Sustainable Development Goals. International research and innovation strategies are underpinned

by insights and expertise from SSH — including from business and management, politics, geography, area studies and international development.

## SSH and The New Agendas for Responsible Research Assessment

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The purposes, main focuses, and methods of research assessment have changed over the last thirty years. We suggest that three stages can be identified in these developments:

The tradition from the end of the last century was – within academia – to use internal disciplinary standards as assessment criteria for recruitment and internal distribution of resources. Research assessment was practiced within disciplines and did not consider other disciplines or societal needs. Externally, in research policy, research was expected to be useful and contribute to economic growth, which was appealing to some areas of research. The social sciences and humanities, however, experienced stressful estrangement and cutbacks or splendid invisibility.

Then came the era with a strong focus on Excellence in research assessment by funders and organizers of research. Excellence seemed to be a common denominator for disciplinary standards which could include all areas of research and build a bridge over to societal expectations. Excellence as a notion therefore seemed appealing to the social sciences and humanities. In research policy, however, the call for Excellence turned out to be a strong instrument of prioritization: We will only fund the best, and the funded will get more. Also, the era of Excellence in research assessment coincided with the increasing availability of online bibliometric information and its use in performance-based funding. Excellence was measured as citations or the appearance of publications in top international journals in bibliographic databases where the social sciences and humanities are marginalized. This situation inspired the formation of the European Network for Research Assessment in the Social Sciences and Humanities (ENRESSH).

The trends in research assessment have now entered a third stage with more focus on Equity, Diversity, and Inclusion (EDI) and on societal challenges (SDG): Sustainable Developments Goals). In national research assessments, these policy shifts transpire as new emphasis on the societal responsibility of research performing institutions. The Coalition for Advancing Research Assessment (CoARA) has been working since 2022 to broaden the criteria and change the assessment methods in support of the societal impact of research as well as of research quality. Another example is the Research on Research Institute (RoRI) where major funder and performers of research assessment, both public (e.g., the Swiss National Funding Organization) and private (e.g., the Volkswagen Stiftung), have joined as partners to support and be involved in projects that are taking the new agendas of research assessment forward. As examples, these projects include a critical study of the Matthew effect and early-career setbacks, an exploration of future models that may stimulate transdisciplinary research of societal value, a study of the uses and evaluation of researchers' narrative CVs, and a project to create a global observatory of responsible research assessment.

The authors of this contribution are active in all three organizations mentioned above: ENRESSH, CoARA, and RoRI. We will use the opportunity of the RESSH 2024 Conference to introduce a critical discussion of the implications of the new agendas for research assessment from the point of view of the SSH. Our questions are: How do the new agendas for research assessment reflect the practices and purposes of conducting research in the SSH? Will they strengthen or weaken the conditions for performing good and meaningful research in the SSH? When suggesting answers to these questions, we will at the same time reflect on our direct experiences with three recent research assessment arrangements are influenced by the new agendas in three different countries:

- The new principles for the ongoing national evaluations of research subjects and topics in Norway
- The ongoing national evaluation in Sweden of how higher education institutions organize for societal impact
- The new so-called AAU Research Indicator which aims to advance scientific publishing, impact, collaboration, visibility, openness, and innovation at Aalborg University in Denmark

## DAY 2

SESSION 5.2 / Societal Impact: Context and Concepts

### Approaching University Chairs as Spaces for Collaborations Between University and Non-Academic Actors

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### INTRODUCTION

Universities are facing increasing pressure to demonstrate their societal and economic relevance, leading to heightened expectations regarding their impact on society (Compagnucci and Spigarelli, 2020). This has led most universities to set up and maintain dedicated formal structures to promote scientists' collaboration with industry (Perkmann et al., 2019). One prominent form of such structures is the Technology Transfer Offices (TTO), which play a brokering role between academia and industry (Villani et al., 2017). Scholars have also proposed other instruments and structures to facilitate collaboration, usually with a focus on university – industry engagement. For instance, programs to enhance the commercialization capabilities of universities (Rasmussen, 2008), or promote links between universities, firms and other non-academic institutions through the establishment of science parks (Siegel et al., 2003) have been also suggested.

While most of these policies and structures perform relatively good in channelizing formal and commercially-related forms of engagement such as IP licensing and academic spin-off creation, they are subject to important limitations. First, they often fail to monitor and/or support other collaborative forms that are societally and economically relevant and non-channeled through traditional contract-based agreement. Second, they might underscore valorisation and collaborative activities from certain scientific fields such as social sciences and humanities (SSH), as these fields are characterised by informal collaborations and their research provides cultural and social value that may not always fit to be channelled through the traditional technologically-led and economically-laden structures (Giménez-Toledo et al., 2023; Olmos-Peñuela et al., 2014). Such limitations are problematic as they result in a partial understanding of the collaborative potential of universities and missed collaborative opportunities, particularly in the SSH field, which might systematically underscore its collaborative potential.

Against this backdrop, our study draws attention to an alternative university instrument, namely, university chairs (UCs), which may be suitable to support more informal valorisation activities. In Spain, University Chairs (UCs) are established through agreements between universities and non-academic public and private entities to UCs tackle objectives of different nature of common interest for the parties, usually about a topic or field. These agreements aim to foster connections between universities and their surrounding environments, facilitating collaborations to pursue various activities aligned with the missions of the university. The multi-year agreement serves as a comprehensive framework that enables a broad spectrum of activities aligned with university missions (often, excluding the provision of specific services to non-academic organizations, which are channelled via other collaborative instruments). Instead, UCs operates under the concept of patronage and sponsorship, promoting activities related to the field or topic for which it was established. Given that UC are funded by non-academic actors, they hold influence over the 'raison d'être', objectives and dynamics of the UC. This influence is exerted through a joint parity steering committee, where both the university and the funding organizations are equally represented. As a result, UC serves as a steady and stable spaces for fruitful collaborations that extend beyond an individual specific project or contract, embodying a strategic and lasting union. From a regulatory standpoint, UCs are directly subject to university-level regulations. There is no specific national regulation addressing university chairs. Consequently, each university establishes its own regulations, which may vary significantly in key aspects such as the minimum financial endowment required for establishment, duration, compensation for the director, type of activities that might be conducted within the chairs, and other governance-related factors.

Following the examination of UCs as alternative instruments, the aim of this study is twofold. Firstly, to explore the magnitude and heterogeneity of UCs in the Spanish context, with a special focus on the field of SSH. Secondly, to illustrate through case studies the types of activities conducted by SSH UCs, aiming to unpack their potential to valorise research and foster connections between the university and society.

### DATA AND METHODS

Our study combines quantitative and qualitative data to address our research objectives. First, we rely on an original dataset that covers the entire population of UCs in Spain by 2019, accounting for more than 1,000 UCs from public universities. This dataset includes information at the chair level (such as the scientific field, geographical location or primary type of funding) and has been expanded with updated information on UCs identified by 2023. A descriptive analysis of this comprehensive dataset will enable us to determine the prevalence of UCs across universities and fields, compare the landscape of UCs between 2019 and 2023, and describe their main characteristics.

Second, we rely on qualitative information obtained through interviews to gain a deeper understanding of how university chairs are managed and operate. For each case study, we interview representatives from both sides of the collaboration: the director of the chair (university actor) and a representative appointed by the funding entity involved in the chair (non-academic actor). Interviews are conducted using a semi-structured guide adapted to each type of informant, addressing aspects such as the origin of the chair, the types of activities conducted, motivations for participation, and perceived obstacles.

### EXPECTED RESULTS AND IMPLICATIONS

At the time of writing, we are still conducting interviews. We expect that our findings will contribute to shedding light on the potential of university chairs as catalysers of university-society interactions. Specially within the field of SSH, we expect to illustrate how UCs can serve as a valuable instrument for university researchers to valorise research and fostering collaborative activities with its environment. These findings may have important implications for university managers and policymakers.

### ACKNOWLEDGEMENT

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### REFERENCES

Compagnucci, L., Spigarelli, F. (2020). The Third Mission of the university: A systematic literature review on potentials and constraints. Technological Forecasting and Social Change 161, 120284.

Giménez-Toledo, E., Olmos-Peñuela, J., Castro-Martínez, E., Perruchas, F. (2023). The forms of societal interaction in the social sciences, humanities and arts: Below the tip of the iceberg. Research Evaluation, rvad016.

Olmos-Peñuela, J., Benneworth, P., Castro-Martínez, E. (2014). Are 'STEM from Mars and SSH from Venus'?: Challenging disciplinary stereotypes of research's social value. Science and Public Policy 41, 384–400.

Perkmann, M., McKelvey, M., Phillips, N. (2019). Protecting Scientists from Gordon Gekko: How Organizations Use Hybrid Spaces to Engage with Multiple Institutional Logics. Organization Science 30, 298–318.

Rasmussen, E. (2008). Government instruments to support the commercialization of university research: Lessons from Canada. Technovation 28, 506–517.

Siegel, D.S., Waldman, D., Link, A. (2003). Assessing the impact of organizational practices on the relative productivity of university technology transfer offices: an exploratory study. Research Policy 32, 27–48.

Villani, E., Rasmussen, E., Grimaldi, R. (2017). How intermediary organizations facilitate university-industry technology transfer: A proximity approach. Technological Forecasting and Social Change 114, 86–102.

## Research Impact Evaluation – From Centre to (Semi)Periphery?

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Research impact evaluation is an emergent, influential trend in science policy. The question "how to evaluate impact" has been a hot topic amongst policy-makers, evaluation experts and scholars internationally for at least a decade (Grant et al., 2009). The concept that the impact of academic research could and should be systematically evaluated can be linked to several broader processes affecting academia since the 1970s. Among them is the shift towards knowledge-based economies (Jessop et al., 2008), the rise of the idea of entrepreneurial university and of 'academic capitalism' (Slaughter & Leslie, 1997), globalisation of academia (Marginson & Van der Wende, 2007), the growing importance of audit cultures in organisations (Power, 1997), the increasing use of research metrics (Wilsdon et al., 2015), and the concerns regarding their excessive usage. There is also growing acknowledgment of the contribution which academia can make in the context of global challenges, supporting the achievement of Sustainable Development Goals (SDGs)(International Science Council, 2023). In terms of disciplines and modes of science production we can observe a turn towards concepts such as Mission (Driven) Science, Engaged Science, Community Science, Transdisciplinary Science, Mode 2 Science, context-sensitive science or interactive science (Gibbons, 2000) - all of which stress the embeddedness of science production in the broader social, political and environmental context.

The request for systems which track and possibly assign metrics to academic efforts related to the generation of impact results in a policy drive to create frameworks for impact evaluation. We can observe analogous efforts towards developing such frameworks in various parts of the globe. Ongoing communication and co-ordination activities between these national and supra-national contexts (such as international workshops and conferences, international work groups, associations focused on disseminating knowledge about impact evaluation) as well as broad access to the state of art in impact evaluation (most of the publications being in open access an published online) could in theory lead to a more or less uniform approach to impact evaluation, or at least to a shared understanding of the concept. And yet, this is not the case.

In this paper I will argue that the concept of 'impact' takes on a different meaning and role in a specific research evaluation system, depending on the disciplinary, institutional and national context into which it is introduced. I will argue this point by building on the comparison of research impact evaluation protocols used in the UK, Norway and Poland in the period 2014-2022. Specifically, I will look at the UK's

Research Excellence Framework (REF) with editions in 2014 and 2022, the Norwegian Humeval and Sameval (2016–2017) and Poland's Evaluation on Scientific Activity 2021–2022. These exercises were selected for comparison as the Norwegian and Polish impact evaluation protocols are explicitly modeled on the British REF. Despite having adopted the same basic definition, criteria, mode of evaluation (expert review and case study template, the effect of the evaluation on academic discourse and its general reception has been entirely different in each of the studied contexts.

I will start with a presentation of the timeline of policy development in the three countries. For each of the analysed countries I will examine to what degree the adopted policy can be considered 'open' – thereby linking to the main theme of the conference. I will also attempt a theorisation of the process of policy borrowing in the area of impact evaluation in terms of the centre-periphery dynamic (Wallerstein, 2020) which continues to define the world scientific system.

### REFERENCES

Gibbons, M. (2000). Mode 2 society and the emergence of context-sensitive science. Science and Public Policy, 27(3), 159–163. https://doi.org/10.3152/147154300781782011

Grant, J., Brutscher, P.-B., Kirk, S., Butler, L., & Wooding, S. (2009). Capturing Research Impacts. A review of international practice: Vol. I. RAND Europe. <u>https://www.rand.org/content/dam/rand/pubs/documented\_briefings/2010/RAND\_D</u> B578.pdf

International Science Council. (2023). The Future of Research Evaluation: A SynthesisofCurrentDebatesandDevelopments.https://staticl.squarespace.com/static/6422d64442b7c104ae4c1900/t/645cc177ablc132e69603e67/1683800442309/2023-05-11+Evaluation+-+WEB.pdf

Jessop, B., Fairclough, N., & Wodak, R. (2008). Education and the knowledge based economy in Europe. Brill; /z-wcorg/. <u>http://www.myilibrary.com?id=197215</u>

Marginson, S., & Van der Wende, M. (2007). Globalisation and higher education. Education Working Paper, 8.

Power, M. (1997). The audit society: Rituals of verification (1165141). Oxford University Press.

Slaughter, S., & Leslie, L. L. (1997). Academic capitalism: Politics, policies, and the entrepreneurial university. Johns Hopkins University Press; /z-wcorg/

Wallerstein, I. (2020). World-Systems Analysis: An Introduction. Duke University Press.

Wilsdon, J. (2015). The Metric Tide: Report of the Independent Review of the Role ofMetricsinResearchAssessmentandManagement.https://doi.org/10.13140/RG.2.1.4929.1363
# Societal Impact Or Engaging With The Public: The Role Of Learned Societies In The Dissemination Of Research

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Societal Impact has become an important topic in higher education and, therefore, in research evaluation (Sivertsen & Meijer, 2020). Given the needs of the knowledge society, universities, projects and even scholars are expected to provide evidence for the societal relevance and impact of their research (see for an overview of European practices of impact evaluation Ochsner & Bulaitis, 2023). The discourse on impact evaluation is dominated by two impact evaluation exercises, the REF in the United Kingdom and the SEP in The Netherlands, both of which focus on demonstrable impact on society by single projects (i.e., each project under evaluation has to demonstrate its manifest impact on society). In this presentation, we argue that a) research is a collective endeavour, and that societal relevance or impact does not result from individual efforts or single actors but rather from research practice in its entirety; and b) that the focus on demonstrable impact comes with conceptual issues of how research can impact society. The pathways to impact can be very diverse (Muhonen et al., 2020) and impact evaluation a very complex endeavour, so that a focus on manifest, demonstrable impact of single projects can be counter-productive and lead to negative steering effects. A re-thinking of conceptualising societal impact is necessary, based on an understanding of different impact pathways.

In our presentation, we follow one such potential pathway. We investigate whether learned societies, typically consisting of professionals, scholars, and researchers who are deeply involved in advancing knowledge and understanding within a particular field or discipline, play a role in how consolidated research findings are disseminated to the relevant public. We therefore follow the research question whether learned societies from social sciences and humanities (SSH) see it as their role to demonstrate and communicate the relevance of the research to the relevant audiences, such as policy makers, professionals in a field, the interested lay public, or society in general. Using a survey among learned societies in the SSH in Belgium, Finland, Croatia, Lithuania, Portugal, Slovenia, Switzerland, and the UK, we focus on dissemination activities and collaborations learned societies report to be engaged in.

## METHOD

To investigate learned societies' potential impact activities, we developed a survey among learned societies in the SSH across seven European countries. The survey design was adapted from a survey conducted in Finland by Korkeamäki et al. (2019) to the international context within the COST Action CA-15137 "European Network for Research Evaluation in the Social Sciences and the Humanities (ENRESSH)". This resulted in an improved questionnaire in English. The research design followed five steps: selection of participating countries, identification of learned societies in the SSH in each country, elaboration of variables and subsequent questionnaire, survey dissemination, data collection, and finally, data analysis.

The inclusion criteria for learned societies to be invited to participate in the survey was that they at least partly engage in SSH research. The process of approaching learned societies differed across countries because the learned societies are organized differently. It ranged from using the national register of learned societies (HR), a national business register (SI), umbrella organisations of learned societies (CH and UK), to desktop research, networks, and a combination of different smaller umbrella organisations (BE, LT, PT). The survey targeted directors and presidents of the learned societies (which, of course, could delegate the task to other administrative personnel like a secretary or vice-president). The survey was fielded in spring 2020 and led to a sample of 343 societies in seven countries. The response rate differed strongly between countries, depending on the quality of the gross sample (from 13% in PT to 77% in LT). The mean response rate was 33%, leading to an effective sample of 114 learned societies having answered the survey.

For the analysis, we use descriptive statistics and apply Joint Correspondence Analysis (Greenacre, 2007) for a more detailed analysis and classification of how learned societies interact with different audiences.

### RESULTS

The results from the still ongoing analysis show that many learned societies see it as their role to consolidate research results and communicate them to different stakeholders, including the wider public. However, there are interesting differences regarding how learned societies approach this task. Focusing on different learned societies' activities, such as collaborations with different stakeholders, academic, professional and outreach publishing activities, citizen science and open data engagement, activities in ethical committees and other public activities as well as organization of scholarly as well as outreach and interaction events, we have identified four types of interaction with the public: 1) science-oriented; 2) conformity; 3) information and learning; 4) consulting and interaction. Thus, The first type of learned societies focus on scientific networking and activities and advancement of research and science. The second type takes up research questions from society but focuses on scientific activities. The third type is strongly engaged in education while the fourth type focuses on manifest societal impact, takes up research questions from all stakeholders and interacts strongly with them, including businesses.

#### Implications

Learned societies contribute to different degrees and in various forms to link research with the relevant stakeholders in society. It is not only dissemination of research to the public but interactions at different levels of the research process that make the work of learned societies valuable. Furthermore, by their engagement in educational activities, they are fostering collaboration and interdisciplinary exchange, increasing public awareness and science literacy and promoting research integrity standards and ethics between academics, disciplines and the public.

Our results suggest that universities should increase and make visible their interactions with learned societies to demonstrate the societal relevance of their research. Moreover, participation in the governance and activities of learned societies should be recognized and rewarded among the valuable contributions researchers make to science and society.

### ACKNOWLEDGEMENTS

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### REFERENCES

Greenacre, M. (2007). Correspondence Analysis in Practice, Second Edition (Boca Raton, FL; 2nd ed.). Chapman & Hall. https://www.taylorfrancis.com/books/9781420011234

Korkeamäki, L., Late, E., Pölönen, J., Ryynänen-Karjalainen, L. & Syrjämäki, S. (2019). Learned Societies in Finland 2018 (Helsinki; Web Publications of the Federation of Finnish Learned Societies). Web Publications of the Federation of Finnish Learned Societies.

https://www.tsv.fi/sites/tsv.fi/files/media/LearnedSocietiesInFinland2018.pdf

Muhonen, R., Benneworth, P. & Olmos-Peñuela, J. (2020). From productive interactions to impact pathways: Understanding the key dimensions in developing

SSH research societal impact. Research Evaluation, 29(1), 34–47. https://doi.org/10.1093/reseval/rvz003

Sivertsen, G. & Meijer, I. (2020). Normal versus extraordinary societal impact: how to understand, evaluate, and improve research activities in their relations to society? Research Evaluation, 29(1), 66–70. <u>https://doi.org/10.1093/reseval/rvz03</u>

Ochsner, M. & Bulaitis, Z. H. (Ed.) (2023). Accountability in Academic Life: European Perspectives on Societal Impact Evaluation. Edward Elgar. https://doi.org/10.4337/9781800885738.00007

# Towards a Genealogy of Societal Impact

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Recent years have brought more attention to societal impact in research evaluation, especially since the successful marketing of the Research Excellence Framework in the United Kingdom that has seen its export to other countries (Wróblewska, 2021). However, the conceptualization of societal impact lags very much behind its actual use in evaluations (Donovan, 2019; Wróblewska, 2021). What is striking is that most scholars seem to treat societal impact as a totally new concept entering into scientific policy only by the end of the 20th century (e.g., Gibbons et al., 1994, p.3). Historical approaches to societal impact evaluation are rather scarce (e.g., Frodeman, 2017; Gedutis et al. 2023). However, the arguments taken in societal impact evaluation are very often of a historical nature: Gibbons et al. (1994) posit a change in how research is conducted from mode 1 to mode 2. While mode 1 is said to be "the old way" of doing research, mode 2, which entails societal impact, is said to only take shape at the writing of their book in 1994.

Yet, it requires only a little inquiry into the history of science policy to reveal that societal impact has been crucial for science policy for a long time, which is no surprise. In our presentation, we argue that it is not very wise (and not scholarly either) to ignore what has been done before. We argue that it is very useful to analyse the relationship between politics, economy, society and science over time to better understand the concepts of societal impact that are applied today. Indeed, a historical inquiry into the relation between science and society, looking solely at the term "impact" will not capture all. The notion of "impact" is not new, but "utility" has a longer history (Gedutis et al., 2023); other terms like "innovation", "use" or "relevance" need also be taken into account. While it is not possible to give a full overview on different concepts of the relationship between society and science over the course of (Western) scientific history, we think it is nevertheless useful to bring forward a few examples. Based on Kant, we have developed a scheme according to which we can classify approaches to the relationship between society and science (Gedutis et al., 2023). This scheme not only allows us to differentiate between different approaches over the course of history, but it also helps us to interpret current approaches to impact evaluation.

### SCHEME BASED ON KANT

Kant, himself confronted with a threatening request by the Prussian King that he need to serve the kingdom, analysed the relation of science and society by identifying the

main stakeholders: government, citizens, the higher faculties and the lower faculties (Kant, 1979 [1798]). The differentiation between higher and lower faculties is interesting as the higher faculties serve government, citizens and science, while the lower faculties only serve the "truth", and thus science. The lower faculties therefore also receive less funding and prestige. Therefore, the imperative to impact is the price to pay for being funded and receive social status. Kant thus identifies two dimensions that are relevant for the research-society nexus: truth and power, along which approaches to the research-society nexus can be classified. In this presentation, we will give examples form different such approaches across history. In this abstract, we will give two examples of four possible types: truth over power, power over truth, truth equals power and truth and power apart.

## EXAMPLE 1: POSITIVISTS: TRUTH EQUALS POWER

The positivist scientists were, in contrast to the ancient and medieval philosophers, concerned with the technological value of scientific knowledge. They thought that the main aim of scientific inquiry would not be to reveal the beauty and harmony of the world but to master the world through technological prowess (Nekrašas, 2016). Auguste Comte saw prediction as the most important task of scientific inquiry, achievable to identify causal relationships through observation (Comte, 1975). Francis Bacon finally stated that what human do cannot go beyond nature as it gives humans the limits and concludes that "and so those twin objects, human Knowledge and human Power, do really meet in one" (Bacon, 1989, p. 32).

# EXAMPLE 2: SOVIET REGIME: DIALECTICAL MATERIALISM AND POWER OVER TRUTH

Soviet ideology was self-titled as scientific communism. Which was a move to provide double justification, i.e., it is an irrefutable and indestructible combination of the most progressive kind of knowledge (science) and the most progressive political idea (communism). Scientific communism is built on dialectical materialism with its idea of unity of theory and practice: "During a considerable portion of Soviet history the unity of theory and practice meant for scientists that they should give their research a clear social purpose by tying it to the needs of Soviet society" (Graham 1987: 57). Soviet ideology thus treated science in a utility-based way: "the logic of the state ideology in the USSR has always strictly followed utilitarianism, which in principle can use any methods, including purely administrative, terrorist, scientific to sweep science and its representatives from the face of the earth. It reaches for any means that promises the maximum effect" (Axµe3ep 1991: 86). Despite the pronounced unity of a) knowledge, b) science and ideology and c) communism, Soviet-style utilitarianism clearly privileges Power, to which Truth is accountable.

## CONCLUSION

The idea of societal impact of research is by no means a new one. Nevertheless, the relation between research, society and impact is not a given one. It is rather accidental, i.e. dependent on a dominant ideology. It is therefore necessary to analyse what the ideological underpinnings are and how this impacts the approach to impact evaluation. Seeing parallels to approaches already followed, we might foresee advantages or disadvantages of approaches to impact evaluation.

### REFERENCES

Bacon, F. (1989). *New Atlantis and The Great Instauration* (revised edition). Crofts Classics.

Comte, A. (1975). *Cours de philosophie positive*, vol. 1. Hermann (original work published in 1830–1842.

Donovan, C. (2019). Assessing the broader impacts of publicly funded research. In D. Simon, S. Kuhlmann, J. Stamm & W. Canzler (Eds). *Handbook on Science and Public Policy* (pp. 488–501). Edward Elgar Publishing. <u>https://doi.org/10</u>.4337/9781784715946.00036

Frodeman, R. (2017). The impact agenda and the search for a good life. *Palgrave Communications*, 3(1), Article 3.

Gedutis, A., Bulaitis, Z.H. & Ochsner, M. (2023). The need for historical inquiry into societal impact evaluation: towards a genealogy of the notion of useful research. In M. Ochsner & Z. H. Bulaitis (Eds.). *Accountability in Academic Life: European Perspectives on Societal Impact Evaluation* (pp. 30–50). Cheltenham: Edward Elgar Publishing.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzmann, S., Scott, P., & Trow, M. (1994). *The New Production of Knowledge. The Dynamics of Science and Research in Contemporary Societies.* Sage Publications.

Graham, L. (1987). Science, Philosophy, and Human Behavior in the Soviet Union. New York: Columbia University Press.

Kant, I. (1979). *The Conflict of the Faculties. Der Streit der Fakultäten*. Abaris Books. (Original work published in 1798).

Wróblewska, M. N. (2021). Research impact evaluation and academic discourse. Humanities and Social Sciences Communications, 8, Article 58. <u>http://doi.org/10.1057/s41599-021-00727-8</u>

Ахиезер, А. (1991). Идеология — предмет науки, наука — элемент идеологии [Ideology is an object of science, science is an element of ideology] // Общественные науки и современность, 1991, 1, 83–89.