Minerva
https://doi.org/10.1007/s11024-024-09558-8

The Impact of Impact: An Invitation to Philosophise

Rene Brauer[1] · Ismo Björn[1] · Glenn Burgess[2] · Mirek Dymitrow[3] · John Greenman[4] · Elżbieta Grzelak-Kostulska[5] · Pirjo Pöllänen[1] · Terry Williams[6]

Accepted: 14 November 2024

Abstract This position paper argues for the introduction of a philosophy of research impact, as an invitation to think deeply about the implications of the impact agenda. It delves into the transformative influence of prioritising the end-product of the research journey over the entire knowledge production process. We argue that the prevalence of research impact assessment in Western research ecosystems has reshaped various facets of research, extending from funding proposals to the overarching goals of research agendas, assessment regimes and promotion structures. Through self-reflective analysis, this position paper critically assesses the consequences of this paradigm shift. Utilising perspectives from the UK, Poland, Sweden, and Finland, we explore tensions, conflicts, opportunities, and viabilities arising from such a shift in the teleological purpose of research. This selection of countries offers a spectrum, ranging from early adopters of impact assessment regimes to those where such evaluation is largely absent as of now, and its intermediaries. Moreover, our examination extends across different disciplinary foci, including allied health, business and management studies, earth science, human geography, and history. Our findings suggest a discernible alteration in the fundamental logic of research, where the focus shifts from checks and balances geared towards the advancement of knowledge, towards other supposedly more important goals. Here

✉ Rene Brauer
rene.brauer@uef.fi

[1] Karelian Institute, University of Eastern Finland, Joensuu, Finland

[2] School of Humanities, University of Hull, Hull, UK

[3] Department of Cultural Sciences, Linnaeus University, Växjö, Sweden

[4] Centre of Biomedical Sciences, University of Hull, Hull, UK

[5] Institute of Socio-Economical Geography and Spatial Management, Nicolaus Copernicus University, Toruń, Poland

[6] Business School, University of Hull, Hull, UK

Published online: 29 January 2025

research is merely cast as an instrumental means to achieve broader societal, political, economic, environmental (etc.) goals. Additionally, we observe that as the formalisation of research impact evaluation intensifies, there are diminishing degrees of freedom for scholars to challenge contemporary power structures and to think innovatively within their research ecosystem.

Keywords Research impact · Research evaluation · Academic freedom · Research ecosystem · Meta-research

Introduction

The impact of research, beyond academic circles, has become an integral part of Western research ecosystems (Williams and Lewis 2021). Sociologically, a research ecosystem includes scholars, students, funders, administrators, librarians, technicians, estates staff, and other research users, along with the necessary funds, resources, technology, checks and balances, and infrastructure that make the research process possible (Brauer et al. 2021). In this position paper, we describe the research ecosystem as the process and context that transforms research data into accepted scientific truth, ultimately producing impact. In short, the social and material assemblage of individuals, alongside their relations to wider society (DeLanda 2019) is then codified into judgements about which academics have the recognised authority to make factual statements legitimately, how, when, and why they do so, and what their epistemic boundaries are within the context of research impact (Lauronen 2022a). Legitimate authority refers here to the recognised and accepted right of certain individuals or institutions to assess the value and impact of research and to make decisions based on these assessments. The aim of this position paper is to provide a philosophical framework for reflecting on how questions of legitimate authority relate to research impact and how these judgements affect the broader research ecosystem. In short, we invite the reader to consider the philosophy of research impact.

This position paper locates a knowledge gap as to the impact of impact upon the research ecosystem as its starting point. Whilst on the surface the notion of research impact may be well defined, it is less clear what its long-term consequences are. There is no denying that "*these frameworks provide powerful incentives, with the potential to define the criteria of success for academic research*" (Hill 2016: 3), as argued by the proponents of the impact agenda. Henceforth, the impact agenda can be understood as the push to emphasize the outcome of research, whilst potentially jeopardising important procedural values of the research process (e.g. academic freedom, Holbrook 2017). Currently, it is unclear exactly which drivers are considered the most important, when judgements are made that an impact claim is beneficial, and little is known about subsequent influences upon the organisation of the research ecosystem and its function (cf. Bengtsen 2022). Due to disciplinary siloing, it is easy to overlook how the relationships between individuals within the wider research ecosystem are affected by this (Wróblewska 2021), and to also overlook the significance of national differences.

Our research question is: what intended and unintended changes does the impact agenda bring about to disciplinary and national differences within the research ecosystem? Our research objectives are as follows: firstly, provide an overview of research impact assessment and how it theoretically changes the research process; secondly, reflect upon how such impact evaluation pressures manifest in our own professional lives; and thirdly, discuss what are the potential intended and unintended consequences for knowledge production from impact evaluation. Henceforth, the structure of the paper is as follows, there is a brief background and literature review, to display that whilst an impact assessment may be novel, the case of making utilitarian-based arguments as a justification for science/research is not. Then we discuss the theory behind how research impact functions sociologically and what dynamics can cause blind spots in the impact evaluation of the research ecosystem, causing unintended consequences. In the fourth section, we elaborate on our methodology of how we arrived at and structured our auto-ethnographical reflections. The fifth section then represents these very reflections, identifying similarities and differences. The sixth section is the general discussion of our findings across the national and disciplinary differences.

Background

The next two sections address our first research objective. This section outlines a brief review of the impact studies literature, and its limitations. Thereafter, the underpinning logic behind the impact agenda is unpacked, to identify potential, unintended, consequences of impact assessment and their effects upon the research ecosystem.

Research Impact Studies

Over the past two decades, the impact agenda has gained prominence, particularly in the Anglophone research sphere, with the UK's national research assessment at the forefront (Martin 2011). However, concerns have emerged regarding its implications for academic freedom and trust in scientific expertise (Holbrook 2017). Much of the critical literature on the impact agenda has a distinctive UK higher education focus, as it is within this context that many of the researchers writing about it are operating (e.g. Derrick and Samuel 2016). Scholars discuss the dilemmas arising from competitive accountability (Watermeyer 2019) or epistemic corruption (Kidd et al. 2021). Additional concerns include the uncertainties inherent in assessing impact (Watermeyer and Chubb 2019), how to operationalise the language used (Bayley and Phipps 2019), the emotional strains on academics (Watermeyer et al. 2022), and legitimate reduction of complexity (Watermeyer and Tomlinson 2022). In the UK, these pressures are largely driven by the national research assessment framework, where 'research impact' is a distinct category (Watermeyer and Hedgecoe 2016), which undeniably imposes costs on individual academics and institutions (Watermeyer and Olssen 2016). Not to mention research that can cause harm, which technically is also a research impact—or 'grimpact', to use the coined neologism (Derrick et al., 2018). Therefore, part of our here identified knowledge gap is whether

these challenges are unique to the UK context (Olssen 2016) or indicative of a more fundamental issues in academia.

We say this, because impact by now represents a global phenomenon and has become a major industry. In this paper, we specifically contextualise our experiences within the following countries: the United Kingdom which has had a nationalised impact assessment since 2007 (Smith et al. 2011); Poland introduced its national equivalent in 2013 (Lewandowska and Kulczycki 2021); Sweden only assesses impact narrative accounts for entire universities (Hellström and Hellström 2017); and Finland does not yet have a structured impact assessment, albeit impact is getting more prominent within the funding landscape (Lauronen 2022b). These countries (in the aforementioned order) represent a range from early adopter nations of countrywide research impact evaluation all the way to more ad hoc uses of impact evaluation. Yet, whilst the specific assessment structure and its influences on knowledge production might be a new issue, the underlying tension of justifying the authority of scholarly work based on utilitarian claims, and the political tensions that come with that for pedagogy and for research itself, are not (Brauer 2023a).

A Brief Timeline of National Impact Assessment and Its Utilitarian Justifications

Arguably, since their inception, universities, research, and science have had to justify their existence imaginatively (Barnett 2021). One grand Enlightenment narrative that usually implicitly frames discussions around research impact is Auguste Comte's law of three stages (Giddens 1974). In simple terms, according to Comte, a civilisation begins in the theological stage, characterised by restrictions on human behaviour according to divine decrees. The subsequent metaphysical stage emphasizes rights, and behaviour modification is justified by notions of universality and human nature. However, since human behaviour is imperfect and does not adhere to idealist notions, the final stage is the scientific stage, which posits rational explanations of human fallibility and more effective modes of behaviour manipulation based on empirical insights. Francis Bacon, Jerry Bentham & John Stuart Mill, made similar arguments for the Anglo-Saxon philosophical tradition. Nowadays, from a post-Enlightenment vantage point, the benefits of science are often reduced to a utilitarian understanding (Rudolph 2020), reflecting an implicit epistemology and ontology of what we now commonly refer to as *research impact*. With the rise of postmodern criticism, such grand narratives became less convincing, along with their justifications for the special status of research and science (Maslanov 2021). Yet, research impact is precisely employed in this authoritative manner, of a grand narrative, to justify taxpayer expenditure on research and provide bench marking for notions of research excellence.

Potential Unintended Consequences of Impact Assessment upon the Research Ecosystem

In practice, the authority void left by the demise of universalist notions was filled by a regime of cost-benefit analysis, initially derived from post-WW2 military

spending. The model gained prominence, supported by utilitarian examples such as the computer, radar, and atom bombs, justifying research investments based on empirical grounds (Porter 1996). The subsequent rise of performance evaluation in academia led to a managerial class using data for strategic decisions, interpreting research utility through key performance indicators. These managers compiled data, employed further administrators, conducting risk benefit analysis on said data, select which aspects to feed upwards, etc. all which subsequently feeds into and reifies strategic decisions of the university leadership (Shore and Wright 2015). Here, we can point out a basic error. Namely, if an impact evaluation regime should indeed function as the benchmarking of good research quality and enable strategic decisions about research investment (HEFCE 2019), then there is a larger problem. Namely, even reflective accounts usually do not take negative impacts into consideration (e.g. Karcher et al. 2021). With that, not only is the picture of strategic decision-making made blind to potentially more than half of the equation, but it also suffers from survivor bias, rendering the cost-benefit logic model of calculation null and void due to ignorance about the full cost. Given the track record of research in the past, it would be naive to expect that contemporary research would cause no harm, even unintended harm. The replicability crisis is a good contemporary example of how evaluation criteria that push for increased publication can generate unintended consequences (Ioannidis 2012).

Similarly, we also know that assessment regimes have negative effects on the research culture and environment, so why should an impact assessment system be any different? The rise of the *publish or perish* culture, with an ever-increasing requirement for publication, is one example (Moosa 2018). In the 2010s, Nobel Prize laureate Peter Higgs already admitted "*he wouldn't be productive enough for today's academic system*" (Aitkenhead 2013). Other examples include work pressures and ambitions of researchers leading to bullying and an unpleasant PhD experience (McAlpine and Weston 2002) or even outright suicide (Greenhill 2014). Regardless, of these negative consequences, the performance requirements to secure a position in academia seem to be steadily rising (Warren 2019). As such, with acknowledged issues and problems within the research ecosystem (e.g. Fleming 2019), it seems reasonable to assume that there will be unintended consequences around the impact agenda and evaluation as well. Yet, determining their severity and scope is much more difficult if we do not acknowledge this adverse potential.

Theory

This section will briefly elaborate on how the research ecosystem generates research impact and how the assessment of impact influences the knowledge production process. As well as how the judgement of beneficial is being consolidated. Thereafter, we expound on how the judgement of what is beneficial is consolidated within an impact context and how it is tied to the authority to make such characterisations.

The Research Ecosystem and Research Impact

Historically, technological progress, social power struggles, and scientific disputes have always had *some* winners, with the institutional structure and global applications of knowledge playing a crucial - but not the only - role in determining what counts as success. Donald Mackenzie (1993), in his seminal work on Intercontinental Ballistic Missiles, elegantly showcases how the *distance* to the *same* innovation process relates to an individual's certainty about the innovation. He describes a so-called *uncertainty trough* that inversely correlates with the distribution of power within social institutions. In other words, individuals at the forefront of research are usually aware of the shortcomings of their knowledge claims due to their direct involvement; however, institutionally, these people often hold limited power. Meanwhile, middle management and university leadership receive curated presentations of these realities, resulting in relatively low uncertainty compared to their influence on decision-making and the academic status economy. Their uncertainty is essentially outsourced to researchers and modulated by those who can make the most convincing arguments, without understanding the actual finer nuances of the case at hand. Outsiders, on the other hand, are largely unaware of these mechanics and thus have relatively high uncertainty due to their outsider position. Meanwhile, outsiders lack real power over institutional structure or decision-making, beyond expressing their discontent when negatively influenced.

The familiar image of standing on the shoulders of giants underscores the presumed cumulative nature of scientific knowledge. It is presumed, because we need to recognise that there is a subjective interpretation in every knowledge claim throughout (Gadamer [1969] 2013). Nevertheless, this dynamic engenders an evolutionary agglomeration, typically oversimplified into a linear progression for pedagogical expediency and narrative purposes (Kuhn [1962] 2012).Wittgenstein ([1969] 2016) posits that the assertion of a supposed objectivity and indisputability of facts serves as a rhetorical device employed for persuasion. In this rhetorical landscape, the metaphorical giants are not impartial vantage points; instead, they are co-opted as influential allies. Researchers routinely incorporate these alliances into their narratives during the creation of new factual claims, thereby creating a framing of factuality to their own subjective arguments. The resulting impact of research, as an outcome of this dynamic within the research ecosystem, signifies the successful integration of expert knowledge into the broader social fabric. Within this framework, the specific social conditions dictate the cost associated with dismantling a newly formulated theory, comprising both propositions and alliances. These conditions determine whether an 'opinion' attains acceptance as true or false, faces criticism or praise, or is designated as 'objective fact' or mere 'subjective interpretation'. The ongoing battles for status—deciding what is deemed factual and who holds the authority to make such assertions—constitute an integral facet of the research ecosystem and represent a perennial feature of scholarly argumentation (Shapin and Schaffer 2011). Consequently, the outcomes of these debates are what we, both epistemologically and ontologically, regard as scientific rationality.

Impact Measurement Influence on Knowledge Production

In practice, we find that being under a rubric of impact is restricting people's academic freedom, as research agendas need to be aligned with existing value domains, which also potentially undermines the quality of academic work (Chubb and Reed 2018). Furthermore, such a consequence maybe intentional or unintentional; nevertheless, that academic performance is being assessed based on impact is now part of academic reality. Such a dynamic then ties into the very logic of *research excellence* (Flink and Peter 2018) that creates an ever-increasing culture of speed that pushes for more and 'better' (and now higher impact) outputs (Berg and Seeber 2018). Ultimately, this makes even academics who are critical of such arrangements complicit in the overarching mechanisations (Morrissey 2015). Here we find that the very framing of research *causing* impact, devoid of any methodological or analytical frameworks, contributes to a crass utilitarianism that influences and shapes research (Bandola-Gill and Smith 2022). This is 'crass' because the interpretive framework/methodological issues necessary to (e)valuate claims of impact are absent, which tacitly normalises the utilitarian cost-benefit logic where it may not be appropriate.

Now we can argue, as indeed people have (e.g. Readings 1996), that such a dynamic is detrimental to the core identity and purpose of the advancement of knowledge/truth and pedagogy within a research ecosystem. Concurrently, the individuals who make decisions about the allocation of funds, future research strategies, promotions, etc., are often those with the least amount of perceived uncertainty regarding a particular innovation claim (and the least understanding of it as well). Previously, such a contingency may have mattered less, as university leadership and middle management mostly drew their staff from their own ranks. However, with the increasing influence of a professional managerial class within universities, detailed understanding of the nuances involved in knowledge production has given way to a largely metrics-based approach (Shore and Wright 1999). It is interesting to note that even the metrics themselves indicate a decline in disruptive innovation (Park et al. 2023). Arguably, the organisation and metric-based evaluation of research assessment also play a contributory role here (Lee and Walsh 2022), following what is known as Campbell's law. This law suggests that the more performance indicators are used as a basis for social decision-making, the more they will be subject to corruption/distortion and lose their function of accurately measuring the dynamics in question (e.g. Klonsky 2024).

Research Impact and Legitimate Authority

To understand how impact claims and legitimate authority are connected, it is essential to explore the sociological foundations of how value judgements are formed. Erving Goffman's (1955) concept of interaction rituals is helpful here. It provides insight into the social practices through which individuals manage interactions and present themselves in everyday life. These rituals help maintain social order and create shared meanings, including judgements of what is and is not considered beneficial. In the context of research impact, this can be seen as analogous to an individual

highlighting a phenomenon as impactful. For this claim to be accepted, the listener must tacitly recognise its validity; otherwise, scepticism may arise, as self-obvious benefits require no explanation. However, research impact, by its very definition included a time where it was not considered beneficial, by the token of its emergence. In other words, the codification of its very significance and judgements of benefit needed to be constructed/manifest, and in retrospect, this very phenomenon is what is then judged as beneficial research impact.

To understand how the recognition of something as beneficial occurs, we can turn to Randall Collins's (2004) concept of interaction ritual chains, which builds on Goffman's work. These chains refer to sequences of social interactions that generate emotional energy and establish bonds, ultimately reinforcing shared understandings of what is and is not valuable. Within the context of research impact, a Gestalt switch occurs when a claim is reinterpreted from a mere factual statement to something with positive value. This transformation is crucial, as it gives the claim weight and significance, and ultimately the very judgement of beneficial. Henceforth, for a value judgement to be accepted as beneficial, legitimate authority must be in place. This authority ensures that the claim is perceived as credible and trustworthy. The connection between interaction ritual chains, the Gestalt switch, and legitimate authority is thus intertwined. Our position paper addresses a critical knowledge gap within this context. In other words, how can researchers' claims of benefit be trusted when previous value regimes emphasised detachment from the world as part of the basis for trustworthiness (Macfarlane 2021), as, for example, the emphasis on disinterestedness within the Mertonian norms of research's own value assumption (Merton 1973).

Methodology and Method

In this section we outline the methodological approach that underpins our position paper and the specific method of structured auto-ethnographic reflections to ask and think through topics and global questions that otherwise do not come up in the busy day to day, as well as our specific disciplinary contexts and chosen method.

Comparing Different Countries and Disciplines Research Cultures

Our research question in this position paper is one of these "*types of broad conceptual questions that cannot be approached empirically without losing their essence*" (Xin et al. 2013: 67). The reason is that context matters in the boundary work that determines what constitutes research or science and what does not (Gieryn 1983), as well as what counts as factual and what does not (Collins and Pinch 1979) within the research ecosystem. Such a boundary needs to be constantly re-drawn, and local and disciplinary differences influence where the boundary falls, specifically in relation to research impact, lest the distinction between research and politics as separate activities does disappear (Weingart 1999). In other words, the particularities and

social relationships of a specific research ecosystem do then constitute how research is done appropriately.

Regarding our research method, we subdivided our analytical focus by national and disciplinary setting. In relation to national context, we have compared research environments in the UK, Poland, Sweden, and Finland, which all have different degrees of a formalised national impact assessment. Regarding disciplinary setting, we have analysed the disciplines of allied health, business and management studies, earth science, human geography, and history. Pragmatically, these national and disciplinary contexts constitute the setting where the research team is active, in terms of contributors to knowledge, research evaluators and/or university management/administration and impact evaluation. Furthermore, the different disciplines allow us to make inferences across the entire academic spectrum, including a research dimension from blue sky to applied research elements, as well as constituting exemplars from the natural sciences, social sciences, and humanities.

Auto-ethnography as a Way to Ask Deep Questions

Procedurally, the auto-ethnographic approach stemmed from prior research engagement that the team was familiar with (Dymitrow and Brauer 2024; Kotze and Dymitrow 2024; Dymitrow and Ingelhag 2019). However, instead of analysing a singular innovation project, university administration, immigration policy implementation, decision-makers, or self-perceptions of the local population, here we have reverted the gaze back to our own conduct itself, back to academia and knowledge production and the research ecosystem. We have had these types of meta-research discussions in different discursive arenas: the development of funding proposals, reading groups, research network meetings, research evaluations, research impact assessment, conference participation, and, not least of all, the writing of this very position paper, its development of the research idea and publication process. Our *factual* argument organically emerged from these points of contact.

The reflections below are very much our own personal opinions. However, as these reflections are framed within a wider theoretical discussion about issues of research impact assessment, they depart from structured collaborations that both reflected on the country specific context and disciplinary idiosyncrasies of previous conceptual research on related subjects (e.g. Brauer 2023b; Burgess 2023; Björn et al. 2018; Williams 2016). We also took inspiration from others who have similarly reflected upon their own research and knowledge production (e.g. Tribe 2018; Grant et al. 2018; Crawford 2020).

Disciplinary Specialisation and Structured Auto-ethnographic Reflections

There are many ways of doing auto-ethnography, at least 20 different types of auto-ethnography are noted by Hughes and Pennington (2017). We have chosen to present our findings as structured auto-ethnographic reflections. This approach blends

autobiographic and ethnographic principles, providing a robust framework for exploring personal experiences within a wider social context. This method allows researchers to engage deeply with their own experiences while grounding them in broader theoretical and cultural analysis. Thereby we are employing an analytic auto-ethnography, as outlined by Anderson (2006), and this approach facilitates a more systematic and theoretically driven reflection on boundary issues and disciplinary specialisation (Gieryn 1983), especially in relation to impact generation. This methodology not only captures personal insights but also validates them through thematic analysis and corroborative interviews, ensuring that the reflections are both contextually rich and analytically rigorous. This approach was essential for addressing complex, multi-layered research questions while maintaining a balance between subjective experience and objective analysis.

Additionally, we also use the rhetoric device of "narrative boxes", so as not to lose the specific empirical on the ground details of impact generation, and value conflicts that arise when the judgement of what constitutes *beneficial* impact occurs. We argue that this creates a dual benefit for our analysis. Firstly, it allows us to showcase how, potentially innocuous, everyday (interaction) rituals scale up (to interaction chains) and can interfere with impact generation and judgements of genuine authority. Secondly, it allows us to fluidly switch between different disciplinary foci, whilst also maintaining and respecting an individual disciplines specific contextual framing. The narrative boxes are structured into two paragraphs, where the first outlines the specific disciplinary context, and the second comments upon the implication of the impact agenda for knowledge creation within that discipline.

Results: Emergent Similarities and Differences

The three sections below address our second research objective and build from experiences of our own professional lives. These structured auto-ethnographic reflections are presented as follows: we first start with introducing the national and disciplinary backgrounds to impact assessment and generation. We then discuss the significant similarities and differences we have observed. The next section will introduce the different national and disciplinary settings.

National and Disciplinary Settings

The United Kingdom: Allied Health and Business and Management Studies

In the UK, research impact assessment has been institutionalised through the Research Excellence Framework (REF), which evolved from the Research Assessment Exercise (RAE) initiated in the late 1980s. The REF does this via so called 'impact case studies', which institutions are asked to submit, and their number depends on the size of the submitting department/school. These case studies are then judged based on their significance and reach.

In the allied health disciplines, research impact is intricately linked with patient outcomes and the practical application of research in healthcare settings. The assessment in this field faces challenges due to the collaborative nature of research, where attributing impact to specific individuals or institutions can be complex. Here, biomedical sciences and pharmacy, key components of allied health, often receive funding from government bodies and charitable organizations, leading to diverse research cultures within the same discipline. All this complexity can become difficult to disentangle for assessment purposes that require a broadly linear narrative. The evolving REF guidelines have raised concerns about the consistency and comparability of impact assessments over time. Additionally, the growing emphasis on narrative CVs highlight that the impact agenda influences the entire construction of academic knowledge. As the end-goal, viz-a-viz impact is narratively positioned as the outcome of the research activities.

Business and management studies in the UK represent a broad and diverse discipline, where the assessment of research impact has posed unique challenges. The REF's requirement for impact case studies has led to strategic manoeuvring by institutions, balancing the need for impactful research with the traditional emphasis on high-quality publications. The discipline's breadth has necessitated the development of flexible assessment criteria that accommodate various forms of impact, from direct policy influence towards more nuanced contributions to business practices. The adverse long-term implications of these assessments include the potential for gaming the system, where institutions may prioritize the development of strong impact narratives over genuine research contributions, as it becomes increasingly difficult to disentangle research from impact generating activities.

Poland: Earth Science

Poland's approach to research impact assessment has evolved since the early 1990s, moving towards a more structured evaluation system that incorporates impact as a critical criterion. The evaluation system, overseen by the Committee for the Evaluation of Scientific Units, emphasizes the economic and societal impact of research. In essence, the assessment of impact is similar to the UK's impact case studies.

In the field of earth science, the assessment of research impact has had significant consequences, including the loss of degree-granting authority and funding for underperforming departments. The emphasis on economic and societal impact has driven departments to align their research activities with evaluation criteria, often at the expense of local research cultures and teaching responsibilities. Henceforth, impact assessment systems are influencing indirectly research cultures within Poland. In general, Polish researchers face challenges in international collaborations due to economic disparities, which can limit their ability to contribute significantly to projects where impact is a primary consideration, outside of *in vogue* issues that are generously renumerated. The long-term sustainability of this impact-driven approach remains uncertain, as the system continues to evolve in response to criticism and changing research priorities.

Sweden: Human Geography

Sweden has taken a different approach to research impact assessment, focusing on university narratives, instead of disciplinary units like the UK or Poland. Here, the Swedish Research Council plays a central role in evaluating research impact, with an emphasis on strategic research areas that align with national priorities. However, as the level of assessment is on the entire university, the examples of impact are more mentioned in a status signalling fashion, rather than any detailed investigation and presentation of the impact.

In human geography, research impact is assessed with a focus on societal relevance and community engagement, reflecting the discipline's interdisciplinary nature and its contributions to policymaking. Swedish human geographers have long advocated for a holistic approach to impact assessment, one that considers both academic significance and real-world implications. This approach aligns with the broader Swedish research culture, which values the integration of social responsibility into academic work. However, the reliance on narrative documentation introduces potential biases and subjectivity, raising questions about the long-term sustainability of this assessment model, especially with an ever-growing managerial mindset of the university leadership.

Finland: History

Finland does not have a national research impact assessment system like the REF or Poland's evaluation system. Instead, impact assessment is more decentralised, with universities adopting ad hoc evaluation methods that often reflect the political agendas of the current government. The discourse of social relevancy and regarding impact, nevertheless, is slowly also entering Finland. For example, the University of Eastern Finland already appointed a so-called *Director of Impact* in September 2022 (UEF 2022). So, whilst these types of roles are not geared towards a specific evaluation system as such, they are conceived and devised to grow networks beyond academic institutions and to help business and industry, with the explicit purpose of boosting the international appeal of a quite regional and local university.

The discipline of history in Finland has a long tradition of being intertwined with political ideological narratives, from the era of Swedish colonialism to the present day. While Finnish historians enjoy a degree of autonomy in choosing their research topics, the growing emphasis on impact, particularly in politically sensitive areas such as the Ukraine war, is beginning to influence research agendas. The impact discourse in Finnish academia is still emerging, and the lack of a systematic impact assessment means that the impact focus remains uneven across disciplines and institutions.

Similarities in Relation to Research Impact Generation and Assessment

We found four major similarities across all our national and disciplinary contexts: an institutional emphasis on impact generation and assessment, a focus on

interdisciplinary and collaborative research as an adaptation to changing political and ideological conditions, challenges in defining and measuring impact, and tensions between long-term issues and strategic priorities.

Institutional Influence and Adaptation

National evaluation systems exhibit both similarities and differences in how they generate and measure research impact, with countries like the UK, Poland, and Sweden offering illustrative examples. The UK's REF, with its structured and formalised approach, prioritises the generation of measurable impact through impact case studies. This system, while comprehensive, has led to strategic behaviour among some institutions, where certain academics are pressured to produce impactful research, while others are meant to focus on high-quality publications. Sweden faces a similar problem. However, there the issue is located on an institutional-university level, rather than on a disciplinary-departmental level. In the UK, for instance, the national evaluation mechanism, started to assess impact as part of broader research quality evaluations with its 2014 iteration. This system, initially centred on scientific output, has evolved to include impact assessment as a crucial criterion, emphasising the influence of research beyond academia. Initially, this was commodified under the heading of 'prestige' under the previous RAE assessment regime. Institutional influence on research impact assessment also manifests across different disciplines and countries. For example, Poland also now shares this institutional emphasis on impact case studies production. In general, in more applied fields, impact assessment often becomes a strategic tool for securing funding and enhancing institutional reputation, reflecting a broader trend where disciplines adapt their research focus to align with institutional expectations. For a less applied field, like history, researchers are feeling the pressure, see narrative box 1.

Narrative box 1. institutional influence and adaptation from history researcher perspective

When the considerations about rankings and impact generation came to Finland, a group of researchers at a regional university started to discuss how these talking points are changing the way that research is done. Historians, by their training are attuned to how everything occurs within context, when they are doing their research. Henceforth, to prompt conversations of how these neoliberal management tools influence research the idea of 'zero impact' was born. Historic research seemed a good fit, as by the token of the discipline it usually serves as an account of what already happened, and not necessarily being impactful in and of itself. The research group printed T-Shirts with the writing "zero impact" on the front and wore them to work. It took a day, and a representative of the university leadership marched into the office of one of the researchers of the group. It was made clear that there is no reason to wear this type of T-shirt at work. Its intended humor did not resonate, and it was deemed as not appropriate. The research group, which was labeled with the same epithet, was also subdued. For example, the department secretary did not dare to add the zero-impact researcher-team to the university's registry of research groups, and this occurred after consultation with the university's management. At a subsequent faculty meeting, an employee of the neighboring unit brought up the name and publicly scolded the research team, that the mere name brings the university into disrepute.

In Finland, the absence of a formalised national evaluation system for research impact creates a different dynamic, where impact is considered but not systematically measured

across all disciplines. Instead, Finnish institutions engage in ad hoc evaluations, often determined by the idiosyncratic conditions of their local institutions or the current government agenda, rather than standardised evaluation criteria. Nevertheless, due to the international prevalence of the impact agenda (the UK being regarded as a trail blazer), the interaction rituals relating to the impact agenda are even present within Finland.

Challenges in Defining and Measuring Impact

Defining and measuring research impact poses significant challenges across different academic disciplines due to their unique characteristics and methodologies. For instance, in disciplines like allied health, patient outcomes represent directly measurable instances of the impact, yet attributing it to specific individuals or institutions can be difficult due to the high amount of collaboration, both within and across institutions. On the other hand, disciplines such as history or human geography, which are often more reflective and interpretive, face challenges in demonstrating impact in a quantifiable way. These disciplines may contribute to societal understanding and policy development over long periods. However, by that very token, it becomes hard to measure impact within the conventional timeframes used in evaluations, of seven to five years. The variety of research cultures, methodologies, and goals across disciplines adds layers of complexity. Narrative box 2 showcases that these types of discussions are not over, even after the measures have been operationalised.

Narrative box 2: reflections on defining impact measures from earth science perspective

At the March 2023 Conference of Managers of Geographic Units in Poland, tensions ran high as researchers gathered to discuss the latest national research evaluation results. The evaluations had been particularly harsh on 'useful' research, which was criticised for its qualitative nature and difficulty in quantifying impact. During the convention, several department heads expressed frustration over the evaluation criteria, which they felt were biased towards more traditional, quantitative research methods. One manager recounted how their department, despite conducting socially relevant and impactful research, received a low ranking, jeopardising their funding and degree-granting authority. The mood was sombre as discussions highlighted the financial constraints and power imbalances within the Polish research ecosystem, especially in international collaborations. In general, the impact agenda in Poland emphasises an overarching precarity for the wider academic sector. Polish researchers find themselves at a disadvantage in international collaborations, such as those within Horizon 2020 applications, due to economic disparities and power imbalances. The unequal footing becomes more pronounced when the impact of a project is predetermined, and Polish researchers are invited merely as token collaborators, highlighting the challenges within the broader context of Eastern European research dynamics.

At the national level, the challenges in defining and measuring impact are compounded by the differing evaluation frameworks employed by various countries. For example, the UK's case study format does allow for flexibility in the accounting, nevertheless it requires institutions to demonstrate the "reach" and "significance" of their research, as these are the evaluation criteria. However, the non-portability of impact—where it is tied to institutions rather than individuals—can lead to strategic behaviour by institutions, such as selectively reporting impactful research or manipulating staff submissions to maximise perceived impact. This is a direct consequence of how the assessment structure is conceived, that it is the institutions

that have impact, instead of individuals. Similarly, in Poland, the national evaluation system has evolved through several iterations, each attempting to balance simplicity and fairness with the diverse research environments across disciplines. Yet, issues like the underappreciation of qualitative research impact remain, particularly in fields like earth science, where practical and societal contributions may not be easily quantifiable, due to the long causality chains that exist. For example, research on urban heat islands or climate change factors is clearly important, yet tracing their impact directly to policy implementation is very difficult. Thereby, the national systems reflect foremost the political and cultural priorities of their countries government, which then subsequently influences how impact is conceptualised and valued.

Interdisciplinary and Collaborative Research

Interdisciplinary and collaborative research, while offering immense potential for innovation and subsequent impact, also encounters significant challenges rooted in the divergent nature of disciplinary cultures and methodologies. Each academic discipline operates under its own set of norms, theoretical frameworks, and methodologies, which can often conflict when researchers from different fields attempt to collaborate. Such an instance is particularly pertinent, when it comes to conceptualising judgements of what is and is not *beneficial* impact in the first place, both in terms of measuring and generating it. These disciplinary differences can lead to misunderstandings and inefficiencies in collaborative projects, as researchers struggle to reconcile conflicting methodologies or agree on common goals. This also applied to official judgements. For example, the intellectual multiplicity within the UK's unit of assessment for business and management studies, due to its sub-disciplines, not only resulted in the creation of a very large panel but also led to the assessment of the work of over 7,000 academics across 108 institutions. This perhaps also meant that claims of impact were taken as narratives, without expectations of being forced into research philosophies or theories of change.

Narrative box 3: reflections on collaborations from a human geography perspective

Within a book review, for a collaborative research project, the collaborating municipality took issue with some of what was expressed by both researchers and other local stakeholders. To stand their chances of stopping the publication, the municipality leadership prepared a lengthy unsolicited peer review of critical points, including statements like: "*The whole chapter about [redacted] should be deleted*.", "*How can you even include this in the final chapter?*", "[This] *does not belong here and needs to be toned down properly.*", and "*Change the heading. We don't write down our politicians and owners*." They were also critical of the municipal employees' narratives: "*It is not possible for* [her] *to express herself in that way. She cannot stand behind [a researcher's] tendentious, conspiratorial, and politically charged claims in her analysis* (…) [She] *should know the goals of the project on the back of her hand*." Whilst serious, the fact that this target peer review was done specifically for one aspect, where the book dealt with a multitude of challenging and controversial aspects, showcased – beyond a doubt – that these comments were politically motivated other than relating to the scientific quality of the argument, as they purported. This ultimately led the university leadership to take the decision to publish the book after several months' deliberation and cancelations.

The narrative box 3 showcases another dimension, when then external stakeholders are thrown into the equation and conflict arises. Such issues per definition will always manifest individually and idiosyncratic but are a consequence of the impact agenda. In addition to the inherent disciplinary challenges, national research evaluation systems also play a crucial role in shaping how interdisciplinary and collaborative research is conducted and assessed. These systems often prioritise certain types of impact over others, by the very structure of the assessment. Additionally, in disciplines like allied health, researchers in renowned hubs like the 'Golden Triangle' (Oxford, Cambridge, and London) or other large, research-intensive universities can engage in super institution work separation due to their access to essential facilities, potentially disenfranchising institutions not already part of these established impact networks. This type of multi-institutional work separation highlights a distinctive feature in allied health, echoing patterns observed in disciplines like biological sciences, chemistry, engineering, and physics. Namely, that once established, these impact infrastructures potentially have an entrenching and exclusionary function on their own. Whether this is conducive or detrimental for innovation is difficult to determine without further research.

Issues with Long-Term Research and Strategic Priorities

The evaluation of research impact presents diverse challenges and strategic priorities across different countries and disciplines. The overarching disciplinary aspects reveal significant variation in how research impact is defined, measured, and valued. For instance, in the UK, the rules and weighting of research have consistently changed with the three iterations of the national assessment which officially included impact assessment. Similarly, in Poland, the systematic evaluation of scientific activity has evolved, reflecting continuous efforts to refine methodologies and adapt to changing realities. However, the complexity and evolution of evaluation criteria in both contexts underscores the issue that it is then difficult to compare results across iterations. On the surface this might only appear as a policy problem, but this is not the case when one takes into consideration the consequences of these rules, where people were elevated to professorship, for example, which might not be replicable in the next five- or seven-year evaluation cycle. In contrast, Sweden's approach devolves this type of operationalisation into key performance indicators to each and every institution, by having impact only assessed on an institutional level. This flexibility not only allows for a more nuanced evaluation but also allows for a greater diversity of human geography departments philosophical traditions. Meanwhile, Finland lacks a national evaluation system akin to the UK or Poland, relying instead on ad hoc university evaluation systems. The downside to these less structured systems is that they are more susceptible to other shifts in the Overton window of wider societies' attention span. The narrative box 4 highlights a related issue regarding academic freedom.

Narrative box 4: reflections on long-term priorities from a social science perspective

As part of a work conflict between a line manager and an impact administrator, where the managerial side of the argument argued for an emphasis with compliance, and the capacity building side of the argument argued for the necessity of protecting academic freedom. The following comment was made: "[…] *regarding the approach taken re:impact. I have made my position clear and your continued arguments that this curtails academic freedom etc. have been noted but are inappropriate*. [… the academics] *are capable of advocating for themselves. I have been informed by* [redacted] *that this is relatively standard practice in other institutions*". The issue that arises is that researchers in question are indeed experts within their specific academic discipline. However, they may not be experts within the social science methodology they need to outline, research and capture their impact. If there are no issues, this might not be a problem. However, as soon as methodological issues occur, both the managerial side and research side, might be completely blindsided by the issues in question. Subsequently, the issues are scapegoated and individualised with approaching deadlines. Rather than that, there is recognition for the systemic issue that it is, that expertise in one domain of knowledge, does not guarantee expertise in all domains of knowledge.

On a national level, evaluating the generation and measurement of research impact reveals similarities and differences in strategic priorities. In the UK, the introduction of impact assessment has led to some challenges. For example, the focus on tangible impacts often overlooks the long-term, qualitative contributions of research. This was specifically noted by the allied health evaluation panel, the assumed reason being that there is a perception that quantitative claims are much more scalable and henceforth perceived as having further reach. Within the discussion of Finland and history (the discipline), the history of Finland became relevant. Finland has long been influenced by politicised (impact) agendas, dating back to Swedish colonialism, where historians were pressured to justify colonial rule. During the Grand Duchy of Finland and the Soviet era, historians faced constraints on research topics, with certain subjects deemed taboo. The collapse of the Soviet Union saw a resurgence of previously suppressed topics. More recently, the Ukraine war and Finland's NATO bid have shifted academic focus, with informal decisions guiding research agendas based on perceived impact. However, impact remains just one of many considerations in Finnish evaluation structures, often shaped by tacit knowledge within informal networks rather than systematic approaches.

Differences in Relation to Research Impact Generation and Assessment

The last section of the results will present salient differences we observed within our structured auto-ethnographical reflections. Despite the obvious differences in minutia, two general aspects stood out. These were the question between centralisation vs. decentralisation within the assessment and the frequency and scope of impact assessments, if there was any.

Centralisation vs. decentralisation

The theme of centralisation versus decentralisation within research impact assessment manifests distinctly across different disciplines, with varying levels of control and influence exerted by centralised bodies. In the UK and Poland, its assessment structure can

be viewed as very centralised. The implication for disciplines like allied health and business and management studies is that there is unavoidable homogenisation. By its very design this centralisation fosters a uniform approach to assessing impact. An over-cautious application of assessment criteria can be problematic, particularly given the collaborative nature of allied health research and its emphasis on inter-institutional collaborations. Similarly, in Poland, the centralised nature meant that earth science departments viewed themselves as competitors, rather than a united discipline. Furthermore, the political nature of the assessment and the non-portability of impact further complicate the situation, potentially leading to game-playing and boundary conflicts between researchers and university managers. The narrative box 5 below highlights such a potentially problematic dynamic. On the other end of the spectrum, decentralisation of impact assessment, as exemplified within Sweden and Finland came with its own challenges. Particularly, in relation to what is the right balance between strategic priorities and the organic evolution of research themes[?], as to ensure sustained innovation.

Narrative box 5: reflections on organisation from an allied health perspective

Impact generation, by its very nature usually is a long-term project, and henceforth how it is emphasised and evaluated becomes a structural question for university organisation. If part of the university is mobilised to go out of their way and evidence their own past impact, they are not doing new work to generate more future impact. Henceforth, it becomes a question of resource allocation. Ought services be centralized to streamline operations and share resources, or should support be devolved to departments and faculties to provide tailored, specific assistance? Within the context of impact generation and assessment, this is not a clear-cut differentiation. Specifically, in relation to allied health, most research can be identified to have impact, although this can be at an early stage if, for instance, a basic study of drug mode of action or side effects etc. However, sometimes a large amount of time has been spent discussing how to evidence impact at the expense of doing the research and generating the outcomes which is a waste of people's time. Here, it seems important that people are cognizant of impact, and how to evidence this, but the fulfillment of impact and its generation should not become more important than the research itself. Not least because much research does not result in significant impact but informs the next innovation.

For sake of argument, we take history in the discipline of history in Finland is a good illustrative example. The Research Council of Finland does seem to manifest a compromise in the sense that they are catering, on the one hand, to the political ambitions of the current government, whilst also considering the disciplinary specific requirements. For the discipline of history, this becomes contentious, as the concurrent Ukraine war and Finland's attempts to join NATO have produced another shift in the Overton window. Here, research funding applications subsequently align themselves with these shifts in the value domains. Henceforth, there are unavoidable informal decisions to be made based on the saliency of an impact discourse when it comes to the university strategies or research agendas. However, these are not necessarily done in any systematic fashion, nor do they need to build upon direct research. Mostly, they depart from informal networks of research leaders and their tacit knowledge of who and what type of impact is important for the region, the state, the university and their academic discipline. In general, impact is seen as important in Finnish evaluation structures, but it only represents one consideration amongst many.

Frequency and Scope of Assessment

Another aspect that influences behaviour, is the frequency and scope of the impact assessment. In general, this meant that with a lower frequency, the scope of the assessment became larger, and vice versa. Furthermore, the academic research process has its own rhythm and time requirements. For example, writing a special issue, liaising with contributors, with the publisher, with the reviewers etc. all takes time. What was notable across the different disciplines and countries was that impact evaluation commonly clashed with other evaluations and tasks. This could be everything from day-to-day teaching, to the end of project meetings, or writing publications. The point being, how the impact agenda was felt by researchers, and what issues became problematic was largely dependent upon where in the construction of the judgement of beneficial the researcher was located, and what steps needed to be taken to reify that judgement. Put differently, two researchers in the very same department may have diametrically opposed experience of the impact assessment. The only difference being that the former research topic happens to be in vogue, and the latter is not. The consequence is that the former has little to criticise of the impact agenda, meanwhile the latter has a lot more criticism. Narrative box 6 expands on the departmental consequences of such a contingency.

Narrative box 6: reflections on institutional adaptation from business and management studies perspective

For business and management studies, certain areas within the discipline (including that of the author writing this part), although ostensibly impact-oriented, have more resembled Hermann Hesse's ([1943] 2000) Glass Bead Game by demonstrating facility in mathematical modelling of highly simplified versions of reality, divorced from the complexities of reality itself. Within that context, the "impact agenda" has discouraged this sort of work, instead encouraging work based in the 'real world' and co-production of research with practitioners. However, the specific rules of the UK impact assessment nevertheless cause issues, since "impact", defined by case studies, is assessed separately to publications. Thereby from an institutional perspective, a subset of people within the Business School is defined as working on "impact" and they must be encouraged in this and – perhaps more importantly for the impact evaluation – gather evidence of impact. For this subset, encouraging their academic career, e.g. producing top-quality journal papers, becomes less important than production of impact cases. For the other research-active academics, top-quality journal articles become all-important for the national evaluation, and "impact" can be downplayed – even if this is to the detriment of their research. For the managerialist business school Dean, instructing each of these subsets (rather than simply allowing academic freedom) causes problems, as the evaluation pressure is pulling apart the two aspects of business and management research which should go together, and potentially damaging long-term priorities at the expense of short-term gains.

In the assessment of human geography research impact, factors such as societal relevance, community engagement, and the practical application of research findings become central. This aligns with the nature of human geography, which often addresses pressing social issues and contributes to policymaking. Specifically, the social responsibility becomes part of Swedish theory crafting. Nevertheless, this then also exposes university researchers to higher level of scrutiny. For example, recent debates within the Swedish parliament identified so-called activist research as problematic. Now we can have a philosophy of research impact, and delineate to what degree all research is activist, in the technical term of activation, as without it nothing would be produced,

not even new knowledge. Yet, the mere existence of these types of debate caused palpable apprehension amongst human geography researchers and university leadership. This manifested amongst other, that routine staffing decision took additional time to appoint, as an extra layer of scrutiny was introduced as to verify if the post in question could or could not be perceived as (negatively) activist. Presumably, these types of implicit and normalised considerations must be even more extreme in evaluation system with a much higher frequency and scope than Sweden's impact assessment.

Discussion

The discussion consists of three parts and answers our third research objective of uncovering potential unintended consequences. Firstly, we contrast our different national context against each other, drawing out distinctive dimensions for our philosophy on the impact of impact. Secondly, we take these reflections and relate them back to our previously introduced theoretical framework. Specifically, to how the research ecosystem produces impact in the first place and how social interaction ritual chains need to be in place to recognise it as beneficial. We finish this section with identifying our own limitations and suggesting future avenues for research as to ascertain legitimate scientific authority and genuine benefit.

Comparing Impact Apples and Research Oranges, and Their Unintended Consequences

As seen with both allied health and business and management studies within the UK, some disciplines are possibly becoming too diverse philosophically, allowing for easy justifications. Here, research impact assessment may simply represent a way to capture and justify the separateness of a research ecosystem, of what contribution these disciplines make to society. Whilst well intentioned, this also comes with a downside. Namely, that to make convincing impact claims on a global level, the teams must be large, and the claims cannot allow space for individual nuances, which in practice may very well stifle the necessary creativity that it is meant to facilitate, and which is presented as a justification of the research ecosystem. Hence, perhaps, the decrease in the number of early career researchers in allied health submissions (HEFCE 2021) is an early warning sign of this adverse dynamic of a shift in research practice/discourse (Wrobeleska et al. 2023). Likewise, there is the risk that the impact assessment merely can become an (empty) social interaction ritual chain, empty in the sense that the university-internal status games and competition for resources are more important than the account and veracity of the impact claim (Crawford 2020).

Both in Poland and the UK, the narrative of impact claims reigns supreme over some sort of causal or theoretical model of how impact claims manifest. Thereby the boundary between (political) ideology and research as a separate process is difficult to maintain in practice. To be charitable to the assessors on these evaluation panels, the very multiplicity of how impact can manifest presents an incredible difficult

challenge to judge impact claims in a fair and consistent manner (Lauronen 2020). Specifically, the Swedish and Polish context drew attention to the economic realities, and international power imbalances that compounded research collaborations, and subsequently the potential of research impact. The identification of research impact is difficult enough as a conceptual challenge, especially the more far reaching the claim becomes the causal link to a specific piece of research. Here, the existing power relations and economic reality may, even unintentionally, reinforce and widen power imbalances even if the very intention behind the impact agenda is the opposite (McCabe et al. 2021).

Finally, whilst not disciplined by an official national research impact evaluation to the same degree as in the UK and Poland, both Sweden and Finland did manifest many of the same challenges posed by research impact evaluation. Potentially, this means that a research impact assessment may not so much introduce new challenges to the research ecosystem as exacerbate existing ones like the separation between political and scientific authority (Weingart 1999). Nevertheless, there is a need for a new vocabulary to articulate and proclaim impact claims competently (Bayley and Phipps 2019) and to specify what issues this creates. For example, a new vocabulary may be necessary to describe the unintended consequences of promoting one's own discipline, creating impact, and scoring well within the assessment framework, in order to identify and address any potential perverse incentives.

The Future of Research Impact and the Research Ecosystem

It seems quite clear now that *research impact,* both as a concept and an assessment framework, will not go away. Even countries that didn't have an official assessment structure to the same degree are embracing the concept. Put differently, the ethical goal of advancing knowledge may be important for the individual scholarly identity, integrity, motivation, and research conduct; but institutional dynamics seem to put little weight on such considerations, judging by their manifested behaviour, even when contradiction becomes undeniable. Thereby, "[t]*he key issue* […] *is not whether these paradoxes exist* […] *but the extent to which they act as a source of stability or, in contrast, transformation* (Shields and Watermeyer 2020: 13). Arguably, judgements, especially ones concerning what constitutes scientific truth, have been at the heart of university disputes for centuries. For example, Immanuel Kant writes that the questioning of what constitutes the proper judgement of authority "*can never end, and it is the philosophy faculty that must always be prepared to keep it going*" (Kant [1798] 1992: 55). Likewise, conflicts concerning scientific authority are also a recurring theme in discussions about the virtues of scientific thinking throughout the ages (Shapin 2015). As such, whilst maybe the conflicts touched upon by research impact are not intrinsically new to the research ecosystem (Pearce and Evans 2018), the specific assessment mechanics of the impact agenda certainly is. Furthermore, now that this data of impact assessment exists, managers and university leadership will be unable to resist making 'strategic' (but short-term) decisions based upon it, which may turn out detrimental in the long run.

Specifically for a philosophy of research impact, this means evaluating the causality chains from research to impact (e.g. Bonaccorsi et al. 2020). This is especially important because impact activities seem to have become just another workload requirement placed on academics. Here, we should not forget that the implied impact logic is different from a research logic (Lauronen 2022c). Thereby, if we now truly do live in a secular age (Taylor 2007), we cannot make an appeal to *impact claims* as universally beneficial without the proper acknowledgement of the limitations of such claims. Not only would this be belying the very philosophical insights into what made scientific claims reliable in the first place (Vattmio 2014), worse still it could contribute to a sort of anti-intellectualism and crass utilitarianism that the very notion of Higher Education is traditionally meant to combat (Szadkowski 2023). Therefore, a philosophy of research impact main's contribution *should* be to uncover and identify the normative dimensions of what value judgements are core to the integrity of the scientific enterprise. In short, if impact claims are value claims, those value assumptions cannot and should not supersede truthfulness as a value, lest we want to live in a post-truth world of our own making (Brauer and Dymitrow 2024).

Limitations and Future Research

Regarding the limitations of our invitation to philosophise, our argument builds upon auto-ethnographic reflections, and hence has the associated methodological limitations. Hence, future research on the impact of impact could study these deep implications for the authority of science and research claims in a much more systematic fashion and with much larger data sets. Similarly, due to our research design, the comparative dimension is somewhat limited, and hence teasing out specific idiosyncratic variances between different research subjects and national contexts, and how these relate specifically to research impact generation and measurement, might be a fruitful area for future study. Thus, although this paper is limited by the breadth and number of contributions it has highlighted important points that need to be rigorously and systematically investigated.

The famous Swedish human geographer Torsten Hägerstrand (1973) points out that both geography and history are what he calls *synthesising disciplines* that are concerned with sense-making of an overabundance (or sometimes absence) of information, and still uncover meaning. Meanwhile, in his words, other disciplines are much more specialised and potentially become overconfident in their increasingly niche area of expertise without acknowledging their limitations. Such reflections seem to be extra important within the context of research impact (e.g. Brauer et al. 2019). Here, a reminder of Schopenhauer's ([1844] 2016) words about the distinction between talent and genius might be instructive. He writes: "*talent hits a target no one else can hit; genius hits a target no one else can see*" (para 31). We aim to highlight the risk that talented individuals, focused on immediate impact, might overlook future knowledge and innovations (Deleuze and Guattari 1994), potentially sacrificing profound long-term benefits for short-term gains.

Conclusion

To conclude, in this position paper we identified the deep unintended consequences of how an impact assessment focus changes the essence of scholarly pursuit, based on our own professional experiences. We invite the reader to philosophise and draw their own conclusions about the trustworthiness of scientifically produced knowledge when the research ecosystem changes in response to the impact agenda, and when researchers are incentivised actively and passively towards becoming agents of social change, i.e. impact. We can certainly identify worrying trends but leave the question open of how far reaching they are to future research on the subject. Hence, this position paper primarily represents a call for action. Not in the impact sense of achieving a specific end-goal, but rather as an encouragement to think, to scrutinise, to ask questions of the supposed benign impact agenda; what are the consequences that such a shift in the telos of research will facilitate? After all, thinking *is* an action, an action that requires space and time to manifest, and cannot be jeopardised for other supposedly more important pursuits. In other words, the *impact of impact* surely represents a worthwhile area of inquiry for meta-research. Here, a philosophy of research impact that identifies and recognises the normative dimensions of impact claims, acknowledges its own limitations, and strives to maintain the integrity of the scientific enterprise amidst an evolving research ecosystem, may just represent a way of how to square the metaphorical impact circle.

Funding Open access funding provided by University of Eastern Finland (including Kuopio University Hospital). The underpinning research received no external funding

Conflict of interest The authors declare no conflict of interest.

References

Aitkenhead, Decca. 2013. Peter Higgs: I wouldn't be productive enough for today's academic system. Guardian/archive.today. https://archive.ph/sHS9i. Accessed 10 October 2024.

Anderson, Leon. 2006. Analytic Autoethnography. *Journal of Contemporary Ethnography* 35(4): 373–395. https://doi.org/10.1177/0891241605280449

Bandola-Gill, Justyna, and Katherine E. Smith. 2022. Governing by narratives: REF impact case studies and restrictive storytelling in performance measurement. *Studies in Higher Education* 47(9): 1857–1871. https://doi.org/10.1080/03075079.2021.1978965

Barnett, Ronald. 2021. The activist university: Identities, profiles, conditions. *Policy Futures in Education* 19(5): 513–526. https://doi.org/10.1177/14782103211003444

Bayley, Julie E., and David Phipps. 2019. Building the concept of research impact literacy. *Evidence & Policy* 15(4): 597–606. https://doi.org/10.1332/174426417X15034894876108

Bengtsen, Søren. S. E. 2022. Academic Activism Reconsidered–between Societal Impact and Emancipation. *Philosophy and Theory in Higher Education* 4(2): 41–60. https://doi.org/10.3726/PTIHE.022022.0005

Berg, Maggie, and Barbara K. Seeber. 2018. *The Slow Professor: Challenging the Culture of Speed in the Academy*. Toronto: University of Toronto Press.

Björn, Ismo, Pirjo Pöllänen, and Jarmo Saarti. 2018. "We Have Decided to Guarantee the Continuity of the Universities Long-Time Funding": The Political Rhetoric of the Ministers of Education and the Reform of University Funding During 2005–2015 in Finland. *Slovak Journal of Political Sciences* 18(1): 5–26. https://sjps.fsvucm.sk/index.php/sjps/article/view/67

Brauer, Rene. 2023a. Research Impact Education: A Systems Perspective on Two Competing Views of Higher Education. *Trends in Higher Education* 2(2): 374–388. https://doi.org/10.3390/higheredu2020022

Brauer, Rene. 2023b. Tourism studies and the changing research ecosystem. *Tourism Recreation Research* 48(4): 524–534. https://doi.org/10.1080/02508281.2023.2188707

Brauer, Rene, and Mirek Dymitrow. 2024. Conflation between 'public good' and 'greater good' in the context of research impact. *Philosophy and Theory in Higher Education* 6(3): 377–405. https://doi.org/10.3726/PTIHE.032024.0377

Brauer, Rene, Mirek Dymitrow, and John Tribe. 2019. The impact of tourism research. *Annals of Tourism Research* 77: 64–78. https://doi.org/10.1016/j.annals.2019.05.006

Brauer, Rene, Mirek Dymitrow, Filipe M. Worsdell, and John Walsh. 2021. What is the research impact of (the ideal of) scientific truth? *Journal of Education Culture and Society* 12(2): 113–136. https://doi.org/10.15503/jecs2021.2.113.136

Bonaccorsi, Andrea, 2021. The credibility of research impact statements: A new analysis of REF with Semantic Hypergraphs. *Science and Public Policy* 48(2): 212–225. https://doi.org/10.1093/scipol/scab008

Burgess, Glenn. 2023. *George Orwell's Perverse Humanity*. New York: Bloomsbury.

Chubb, Jennifer, and Mark Reed. 2018. The politics of research impact: academic perceptions of the implications for research funding, motivation and quality. *British Politics* 13(3): 295–311. https://doi.org/10.1057/s41293-018-0077-9

Collins, Harry M., and Trevor J. Pinch. 1979. The construction of the paranormal: Nothing unscientific is happening. *The Sociological Review*. https://doi.org/10.1111/j.1467-954X.1979.tb00064.x.

Collins, Randall. 2004. *Interaction ritual chains*. Princeton: Princeton University Press.

Crawford, Adam. 2020. Societal impact as 'rituals of verification' and the co-production of knowledge. *The British Journal of Criminology* 60(3): 493–518. https://doi.org/10.1093/bjc/azz076

DeLanda, Manuel. 2019. *A new philosophy of society: Assemblage theory and social complexity*. London: Bloomsbury Publishing.

Deleuze, Gilles, and Félix. Guattari. 1994. *What is philosophy?* New York: Columbia University Press.

Derrick, Gemma E., Rita Faria, Paul Benneworth, David Budtz-Petersen, and Gunnar Sivertsen. 2018. Towards characterising negative impact: Introducing Grimpact. In *23rd International Conference on Science and Technology Indicators.* https://hdl.handle.net/1887/65230.

Derrick, Gemma E., and Gabrielle N. Samuel. 2016. The evaluation scale: Exploring decisions about societal impact in peer review panels. *Minerva* 54: 75–97. https://doi.org/10.1007/s11024-016-9290-0

Dymitrow, Mirek, and Rene Brauer. 2024. Death by a thousand cuts: A microsociology of how university administration stifles solidarity. *Philosophy and Theory in Higher Education.* 6(2): 201–222. https://doi.org/10.3726/PTIHE.022024.0201

Dymitrow, Mirek, and Karin Ingelhag. 2019. *Anatomy of a 21st-century sustainability project: The untold stories*. Gothenburg: Mistra Urban Futures/Chalmers University of Technology. https://research.chalmers.se/publication/517468

Fleming, Peter. 2019. Dark academia: Despair in the neoliberal business school. *Journal of Management Studies*. https://doi.org/10.1111/joms.12521.

Flink, Tim, and Tobias Peter. 2018. Excellence and frontier research as travelling concepts in science policymaking. *Minerva* 56(4): 431–452. https://doi.org/10.1007/s11024-018-9351-7

Gadamer, Hand-Georg. [1969] 2013. *Truth and Method*. London: Bloomsbury.

Giddens, Anthony. 1974. *Positivism and Sociology*. London: Ashgate Publishing Limited.

Gieryn, Thomas F. 1983. Boundary-work and the demarcation of science from non-science: Strains and interests in professional ideologies of scientists. *American Sociological Review* 48(60): 781–795. https://doi.org/10.2307/2095325

Goffman, Erving. 1955. On face-work: An analysis of ritual elements in social interaction. *Psychiatry* 18(3): 213–231. https://doi.org/10.1080/00332747.1955.11023008

Grant, David B., Gyöngyi Kovács, and Karen Spens. 2018. Questionable research practices in academia: Antecedents and consequences. *European Business Review* 30(2): 101–127. https://doi.org/10.1108/EBR-12-2016-0155

Greenhill, Sam. 2014. Professor found dead after cash row: Cancer scientist said to have told fellow academics that chiefs treated him 'like s***'. Mail Online/archive.today. https://archive.ph/LtpQJ. Accessed 10 October 2024.

Hägerstrand, Torsten. 1973. The domain of human geography. In *Directions in Geography*, ed. Richard J. Chorley, 67–88. London: Routledge.

HEFCE (Higher Education Funding Council of England). 2019. *Guidance on submissions*. Retrieved from Research Excellence Framework 2021. https://2021.ref.ac.uk/publications-and-reports/guidance-on-submissions-201901/index.html. Accessed 10 October 2024.

HEFCE. 2021. *Overview report by Main Panel A and Sub-panels 1 to 6*. Research Excellence Framework 2021. https://2021.ref.ac.uk/media/1910/mp-a-overview-report-final-updated-september-2022.pdf. Accessed 10 October 2024.

Hellström, Tomas, and Christina Hellström. 2017. Achieving impact: impact evaluations and narrative simplification. *Prometheus* 35(3): 215–230. https://doi.org/10.1080/08109028.2018.1522829

Hesse, Hermann [1943] 2000. *The glass bead game*. London: Vintage.

Hill, Steven. 2016. Assessing (for) impact: Future assessment of the societal impact of research. *Palgrave Communications*. https://doi.org/10.1057/palcomms.2016.73.

Holbrook, James B. 2017. The future of the impact agenda depends on the revaluation of academic freedom. *Palgrave Communications*. https://doi.org/10.1057/s41599-017-0041-0.

Hughes, Sherick A., and Julie L. Pennington. 2017. *Autoethnography: Process, product, and possibility for critical social research*. Thousand Oaks: Sage Publications.

Ioannidis, John P. 2012. Why science is not necessarily self-correcting. *Perspectives on Psychological Science* 7(6): 645–654. https://doi.org/10.1177/1745691612464056

Kant, Immanuel. 1992. The Conflict of the Faculties = Der Streit der Fakultaten; University of Nebraska Press: Lincoln, NE, USA, [1798]

Karcher, Denis B., Christopher Cvitanovic, Rebecca M. Colvin, Ingrid E. van Putten, and Mark S. Reed. 2021. Is this what success looks like? Mismatches between the aims, claims, and evidence used to demonstrate impact from knowledge exchange processes at the interface of environmental science and policy. *Environmental Science & Policy* 125: 202–218. https://doi.org/10.1016/j.envsci.2021.08.012

Kidd, Ian J., Jennifer Chubb, and Joshua Forstenzer. 2021. Epistemic corruption and the research impact agenda. *Theory and Research in Education* 19(2): 148–167. https://doi.org/10.1177/14778785211029516

Klonsky, David E. 2024. Campbell's Law Explains the Replication Crisis: Pre-Registration Badges Are History Repeating. *Assessment*. https://doi.org/10.1177/10731911241253430

Kotze, Shelly, and Mirek Dymitrow. 2024. Micro-geographies of administration: A wolf in sheep's clothing? The impact of trust on a street-level approach to immigrant integration. *Acta Scientiarum Polonorum Administratio Locorum* 23(2): 259–280. https://doi.org/10.31648/aspal.9131

Kuhn, Thomas S. [1962] 2012. *The structure of scientific revolutions*. Chicago: University of Chicago Press.

Lauronen, Juha-Pekka. 2020. The dilemmas and uncertainties in assessing the societal impact of research. *Science and Public Policy* 47(2): 207–218. https://doi.org/10.1093/scipol/scz059

Lauronen, Juha-Pekka. 2022a. The epistemic, production, and accountability prospects of social impact: An analysis of strategic research proposals. *Research Evaluation* 31(2): 214–225. https://doi.org/10.1093/reseval/rvac001

Lauronen, Juha-Pekka. 2022b. Tension in Interpretations of the Social Impact of the Social Sciences: Walking a Tightrope Between Divergent Conceptualizations of Research Utilization. *SAGE Open*. https://doi.org/10.1177/21582440221089967.

Lauronen, Juha-Pekka. 2022c. *What exactly is research impact? Exploring the concepts, vocabularies and logics used in evaluating the impact of social research*. Helsinki: University of Helsinki.

Lee, You-Na, and John P. Walsh. 2022. Rethinking science as a vocation: One hundred years of bureaucratization of academic science. *Science, Technology, & Human Values* 47(5): 1057–1085. https://doi.org/10.1177/01622439211026020

Lewandowska, Kamila, and Emanuel Kulczycki. 2021. Academic research evaluation in artistic disciplines: the case of Poland. *Assessment & Evaluation in Higher Education*. https://doi.org/10.1080/02602938.2021.1893651.

Macfarlane, Bruce. 2021. The neoliberal academic: Illustrating shifting academic norms in an age of hyper-performativity. *Educational Philosophy and Theory* 53(5): 459–468. https://doi.org/10.1080/00131857.2019.1684262

MacKenzie, Donald A. 1993. *Inventing Accuracy: A Historical Sociology of Nuclear Missile Guidance*. Cambridge: MIT Press.

Martin, Ben R. 2011. The Research Excellence Framework and the 'impact agenda': Are we creating a Frankenstein monster? *Research Evaluation* 20(3): 247–254. https://doi.org/10.3152/095820211X13118583635693

Maslanov, Evgeny V. 2021. Post-science in a post-modern world. *Social Epistemology*. https://doi.org/10.1080/02691728.2021.2000664.

McAlpine, Lynn, and Cynthia Weston. 2002. Reflection: Issues related to improving professors' teaching and students' learning. *Instructional Science* 28: 363–385. https://doi.org/10.1007/978-94-010-0593-7_4

McCabe, Angela, Tom Osegowitsch, Rachel Parker, and Stephen Cox. 2021. Knowledge co-production in academic-practitioner research collaboration: An expanded perspective on power. *Management Learning* 52(5): 604–629. https://doi.org/10.1177/1350507620988431

Merton, Robert K. (1973) [1942]. The Normative Structure of Science. In *The Sociology of Science: Theoretical and Empirical Investigations* ed. Robert K. Merton, 267–278. Chicago: University of Chicago Press. ISBN 978-0-226-52091-9, OCLC 75575

Moosa, Imad A. 2018. *Publish or Perish: Perceived Benefits versus Unintended Consequences*. Cheltenham: Edward Elgar Publishing.

Morrissey, John. 2015. Regimes of performance: Practices of the normalised self in the neoliberal university. *British Journal of Sociology of Education* 36(4): 614–634. https://doi.org/10.31648/aspal.9131

Olssen, Mark. 2016. Neoliberal competition in higher education today: Research, accountability and impact. *British Journal of Sociology of Education*. https://doi.org/10.1080/01425692.2015.1100530.

Park, Michael, Erin Leahey, and Russel J. Funk. 2023. Papers and patents are becoming less disruptive over time. *Nature* 613: 138–144. https://doi.org/10.1038/s41586-022-05543-x

Pearce, Sioned, and Dan Evans. 2018. The rise of impact in academia: Repackaging a long-standing idea. *British Politics* 13(3): 348–360. https://doi.org/10.1057/s41293-018-0079-7

Porter, Theodore M. 1996. *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton: Princeton University Press.

Readings, Bill. 1996. *The University in Ruins*. Cambridge: Harvard University Press.

Rudolph, John L. 2020. The lost moral purpose of science education. *Science Education* 104(5): 895–906. https://doi.org/10.1002/sce.21590

Schopenhauer, Arthur. [1844] 2016. *The World as Will and Representation (Volume 2)*. Toronto: Aegitas Publishing House.

Shapin, Steven. 2015. The virtue of scientific thinking. *Boston Review* 20: 32–39.

Shapin, Steven, and Simon Schaffer. 2011. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life*. Princeton: Princeton University Press.

Shields, Robin, and Richard Watermeyer. 2020. Competing institutional logics in universities in the United Kingdom: Schism in the church of reason. *Studies in Higher Education* 45(1): 3–17. https://doi.org/10.1080/03075079.2018.1504910

Shore, Cris, and Susan Wright. 1999. Audit culture and anthropology: Neo-liberalism in British higher education. *Journal of the Royal Anthropological Institute* 5(4): 557–575. https://doi.org/10.2307/2661148

Shore, Cris, and Susan Wright. 2015. Governing by numbers: Audit culture, rankings and the new world order. *Social Anthropology/anthropologie Sociale* 23(1): 22–28. https://doi.org/10.1111/1469-8676.12098

Smith, Simon, Vicky Ward, and Allan House. 2011. 'Impact' in the proposals for the UK's Research Excellence Framework: Shifting the boundaries of academic autonomy. *Research Policy* 40(10): 1369–1379. https://doi.org/10.1016/j.respol.2011.05.026

Szadkowski, Krystian. 2023. *Capital in Higher Education: A Critique of the Political Economy of the Sector*. London: Palgrave Macmillan.
Taylor, Charles. 2007. *A Secular Age*. Cambridge: Harvard University Press.
Tribe, John. 2018. Creating and curating tourism knowledge. *Annals of Tourism Research* 73: 14–25. https://doi.org/10.1016/j.annals.2018.08.004
UEF. 2022. *Minna Hendolin appointed as Director of Impact at the University of Eastern Finland*. University of Eastern Finland/archive.today. https://archive.ph/XRFSI. Accessed 10 October 2024.
Vattimo, Gianni. 2014. *A Farewell to Truth*. New York: Columbia University Press.
Warren, John R. 2019. How much do you have to publish to get a job in a top sociology department? Or to get tenure? Trends over a generation. *Sociological Science* 6: 172–196. https://doi.org/10.15195/v6.a7
Watermeyer, Richard. 2019. *Competitive accountability in academic life: The struggle for social impact and public legitimacy*. Cheltenham: Edward Elgar Publishing.
Watermeyer, Richard, and Jennifer Chubb. 2019. Evaluating 'impact' in the UK's Research Excellence Framework (REF): Liminality, looseness and new modalities of scholarly distinction. *Studies in Higher Education* 44(9): 1554–1566. https://doi.org/10.1080/03075079.2018.1455082
Watermeyer, Richard, Gemma E. Derrick, and Mar Borras Batalla. 2022. Affective auditing: The emotional weight of the research excellence framework. *Research Evaluation* 31(4): 498–506. https://doi.org/10.1093/reseval/rvac041
Watermeyer, Richard, and Adam Hedgecoe. 2016. Selling 'impact': peer reviewer projections of what is needed and what counts in REF impact case studies. A retrospective analysis. *Journal of Education Policy* 31(5): 651–665. https://doi.org/10.1080/02680939.2016.1170885
Watermeyer, Richard, and Mark Olssen. 2016. 'Excellence' and exclusion: The individual costs of institutional competitiveness. *Minerva* 54: 201–218. https://doi.org/10.1007/s11024-016-9298-5
Watermeyer, Richard, and Michael Tomlinson. 2022. Competitive accountability and the dispossession of academic identity: Haunted by an impact phantom. *Educational Philosophy and Theory* 54: 92–103. https://doi.org/10.1080/00131857.2021.1880388
Weingart, Peter. 1999. Scientific expertise and political accountability: Paradoxes of science in politics. *Science and Public Policy* 26(3): 151–161. https://doi.org/10.3152/147154399781782437
Williams, Kate, and Jenny M. Lewis. 2021. Understanding, measuring, and encouraging public policy research impact. *Australian Journal of Public Administration* 80(3): 554–564. https://doi.org/10.1111/1467-8500.12506
Williams, Terry M. 2016. The Nature of Risk in Complex Projects: Systemicity and Human Reactions. *Academy of Management Proceedings*. https://doi.org/10.5465/ambpp.2016.11417abstract.
Wittgenstein, Ludwig. [1969] 2016. *On Certainty*. Oxford: Blackwell.
Wróblewska, Marta N. 2021. Research impact evaluation and academic discourse. *Humanities and Social Sciences Communications* 8(1): 1–12. https://doi.org/10.1057/s41599-021-00727-8
Wróblewska, Marta. N., Corina Balaban, Gemma E. Derrick, and Paul Benneworth. 2023. The conflict of impact for early career researchers planning for a future in the academy. *Research Evaluation* 33. https://doi.org/10.1093/reseval/rvad024
Xin, Shuang, John Tribe, and Donna Chambers. 2013. Conceptual research in tourism. *Annals of Tourism Research* 41: 66–88. https://doi.org/10.1016/j.annals.2012.12.003

Rene Brauer is a visiting scholar at the Karelian Institute at the University of Eastern Finland (UEF). He has both worked practically with research impact assessment and published extensively on the implications of the impact agenda. He is also the Head Researcher of the Bacchus Institute of Science.

Ismo Björn is adjunct professor at UEF. His expertise is in regional studies and Finnish cultural and intellectual history. He is a founding member and head of the zero-impact research group, which has published widely on the encroachment of neoliberalism and public policy for Finnish Higher Education.

Glenn Burgess is professor in early modern history at the University of Hull (UK), with a research interest in academic freedom. He has served as the Pro-Vice-Chancellor (Academic Affairs & Learning and Teaching, 2014–2019) and Deputy Dean of Research for the Faculty of Arts and Social Sciences (2003–2009) at the University of Hull.

Mirek Dymitrow is associate professor in geography at Linnaeus University, Sweden. His research critically engages with the sociology of science, exploring issues such as research impact, extra-scientific factors, transdisciplinarity, the public good, solidarity, trust, and 'scientific truth.' Recurring inquiries focus on the tensions, transgressions, and unintended consequences that arise at the intersection of politics and research.

John Greenman is professor of tumour immunology at the University of Hull (UK), and has extensive experience of interdisciplinary work with clinicians, chemists and engineers. He's been a panel member of the UK's Research Excellence Framework (REF) for the panel of Allied Health, both in 2014 & 2021.

Elżbieta Grzelak-Kostulska is associate professor in human geography, and director of the Institute of Socio-Economic Geography and Spatial Management at Nicolaus Copernicus University (Poland). She is actively involved in the creation of research impact case studies, for the Polish evaluation of research impact and has a research interest in socio-economic development.

Pirjo Pöllänen is a senior researcher at UEF, with several decades of experience in qualitative and policy research. She is also a member of the zero-impact research group and has many publications that investigate the changes to Finnish university policies and conduct.

Terry Williams is professor emeritus at the University of Hull and the former director of the Risk Institute. He is an accredited project-manager, has edited a leading academic journal and been involved in supporting $1.5bn+ post-project claims. He was also a panel member of the Unit of Assessment for Business and Management Studies for the UK REF 2014 & 2021.