

Research Impact Education: A Systems Perspective on Two Competing Views of Higher Education

Rene Brauer 

Karelian Institute, University of Eastern Finland, 80130 Joensuu, Finland; rbrauer@uef.fi

Abstract: (1) Background: This conceptual paper departs from the background of how Higher Education represents a critical component of the continuation of Western civilisation and culture. Specifically, the paper addresses the knowledge gap of what an emphasis on the outcome/impact does to pedagogy at Western universities. (2) Methods: Methodologically the paper subdivides the educational process into four discrete phases as to reflect upon whom and on what premises the pedagogy happens (teaching, research, funding, and curriculum formation). (3) Research findings: The presented argument suggests that universities can focus on educating students for its own sake or as means to an end. The current impact agenda prioritizes achieving specific goals at the expense of exploratory research, leading to a different definition of research success. This could result in only end-goal-focused individuals being successful and the curriculum being changed to align with their impact ambitions, the unintended consequence being that Higher Education stops being a genuine mechanism for education and instead becomes inadvertent indoctrination. (4) Conclusions: Only by having student benefit as the primary focus of pedagogy (process view) can the inter-generational feedback loop be safeguarded, regardless of how noble other sentiments may appear to be for related practical purposes (end-product view).

Keywords: higher education; research impact; curriculum formation; Western culture; Western philosophy



Citation: Brauer, R. Research Impact Education: A Systems Perspective on Two Competing Views of Higher Education. *Trends High. Educ.* **2023**, *2*, 374–388. <https://doi.org/10.3390/higheredu2020022>

Academic Editor: Colin McCaig

Received: 4 May 2023

Revised: 23 May 2023

Accepted: 31 May 2023

Published: 6 June 2023



Copyright: © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Higher Education providers increasingly focus on student employability, students' satisfaction, and concurrent global challenges in everything from social to environmental issues to attract new students. This is a stark difference to the traditional emphasis of character formation, civic virtues and other epistemic goods provided by yesteryear's arguments of the function of Higher Education [1]. This paper conceptually compares two competing perspectives of Higher Education: one that focuses on the process of knowledge production and the other on the end-result. Both frame their point of departure as the function of the student within a wider society. Specifically, the research impact rubric frames these discussions and draws attention to the value dimension of impact discussed in previous research [2].

Traditional Enlightenment thinkers such as Immanuel Kant [3], with his emphasis to act as if every action can become a universal law, stresses the importance of process compared to that of the outcome. Such sentiments echoed the difficulties to arrive at predictions about the future, based on the existing understanding of the world famously encapsulated by the so-called is/ought divide. Such sentiments acknowledge that any factual description of how the world is does not imply what action ought to be taken [4]. Later thinkers, most famously Karl Marx, rebelled against such philosophical notions, stating that the point of knowledge is not only to understand the world, but to change it [5]. Likewise, one of Roy Bhaskar's charges against Western philosophy was precisely its obsession with epistemology over ontology that, in his view, impeded actions and ultimately problem solution [6].

The so-called impact agenda that concurrently represents a hallmark of Western Higher Education institutions, has institutionalized a utilitarian view of knowledge production through evaluation regimes [7]. From a viewpoint of traditional Higher Education, this clashes with an emphasis of pedagogy over ideology. Hence, the aim of this paper is to conceptually clarify how the two approaches differ in their relation to pedagogy and explore their influences on student education [8]. Specifically, the research question is: what are the feedback loops of these different processes, and how do they influence university student pedagogy intergenerationally? The paper has five interconnected research objectives. Firstly, to outline the constraints on university teaching; secondly, to describe the boundary conditions of university research; thirdly, to clarify the role of university funding success; fourthly, to describe the ingredients in the university curriculum formation; and finally, to discuss the feedback loop of how these different aspects influence each other intergenerationally.

The disposition of the paper is as follows. Next, there will be a brief walkthrough of the research materials that underpin the argument presented here. The walkthrough will continue with a brief explanation of the conceptual research method and philosophical approach. The subsequent sections tackle the first four research objectives, while the discussion section aims to raise the view on the feedback loops and how these processes work across time. A conclusion finalizes the paper and outlines needs for further research.

2. Materials and Methods

The first section outlines the broad theoretical literature that this conceptual research draws upon (Section 2.1). The second section then outlines the methodology and method underpinning this conceptual research and its philosophical approach (Section 2.2).

2.1. Scope of the Research Material

This conceptual research has a very broad literature that it draws upon. It engages with the primary thinkers of the Western canon on Higher Education that have shaped our educational institutions and universities [9]. However, it also draws on modern literature that conceptualizes Higher Education as part of wider social processes and not a closed system of knowledge acquisition [10]. This does not mean that the nuances and requirements of pedagogy are ignored, as they also form part of the argument [11]. Rather, university teaching is contextualized and theorized within a larger university-wide context [12], whereas other agendas, most notably for this paper, such as the impact agenda, represent fundamental issues for the very framing and purpose of Higher Education in the first place [13]. Specifically, this conceptual paper theorizes the influence of the impact agenda on a systematic level [14], with a focus on Higher Education [15].

In relation to the impact agenda and research assessment, the devil is very much in the details, as different countries have their own unique assessment systems. Researchers comment upon the adoption of research impact as an evaluation tool, and how it represents a fundamental shift in terms of academic autonomy [16]. For example, early adopter nations such as the UK noticed that an instrumentalist view of knowledge production can be antithetical to building the very social networks that underpin research impact generation [17]. Australian researchers have commented upon the limits of impact assessment tools, being unable to fully understand more qualitative longitudinal forms of research impact [18]. Midterm adopter nations such as Poland and Sweden have remarked that there need not be a necessary logical link between research quality and the scale of impact [19], or how the very nomenclature of research institutions influence what types of impact claims become possible or not [20]. Notably, even Finland which, does not yet have an official research impact evaluation system as such, is nevertheless subject to have the very impact logic becoming all pervasive as well within its Higher Education system [21].

The reason for why this broad focus is necessary is that every theory of education is also an implicit theory of human nature. Rather than to illustrate this point theoretically, a historical anecdote might prove much more powerful. Early Moravian missionaries to the

Caribbean, such as Friederich Martin (1705–1750) who did missionary work on St. Croix in the period 1736–1750, became a strong advocate of teaching (African) slaves literacy so that they could read the bible [22]. The plantation owners tolerated such proselytizing for a time, as in their view it “taught their converts obedience and made them more hard-working” [23] (p. 747). It also had an unexpected knock-on effect. Namely, the ability to learn to read and recite the word of God univocally challenged racist attitudes that slaves were lesser forms of human beings, incapable of civilised conduct. This is important, because abolitionists such as William Wilberforce (1759–1833) later used these types of precedents rhetorically to make a moral case of why slavery ought to be abolished [24], which ultimately resulted into anti-slavery legislation and enforcement by the British Empire [25]. This makes a very powerful argument of how education can change attitudes over generations, and our very conception of what it means to be human, moral, and true, as well as how it can influence actions and politics.

The point of the previous anecdote was precisely to showcase how education is enmeshed in all sorts of complicated social processes, and how its feedback loop subsequently influences conceptions about the world stretching over more than one human lifespan. Specifically in a research context, a historian of science, Thomas Kuhn, argued that revolutions in science are invisible, and the underlying fundamental paradigms shifts are smoothed over precisely because of an ever-updating curriculum [26]. This process of curriculum formation is not removed from wider social forces; quite the opposite, it is the culmination and end-result of whomever has won the status battles according to the current social norms of the time.

2.2. Conceptual Research Methodology and Method

One of the recent trends within anthropological research is to reveal the perspectivism and situatedness of the author to their subject of study. The here-presented reflections are the result of the author actively working within a UK university as a research impact officer, and being concerned with changes not usually emphasized as important in the day-to-day conduct. Furthermore, they build upon a body of scholarship stretching over a decade on related subjects [27–29]. In general, perspectivism is a conceptual framework that can be traced back to Nietzsche’s attack on Western morality amongst others, when he writes:

“It has gradually become clear to me what every great philosophy up till now has consisted of—namely, the confession of its originator, and a species of involuntary and unconscious autobiography; and moreover that the moral (or immoral) purpose in every philosophy has constituted the true vital germ out of which the entire plant has always grown.” [30] (p. 6)

Likewise, Feminist scholars draw attention to the situatedness of the dominant and marginal perspectives, and how they relate to the knowledge that is produced [31]. Michael DeLanda [32], drawing on Gilles Deleuze’s idea of seeing society as a complex intermeshing of assemblages, makes the point that our traditional philosophical conceptual tools are not well-suited to deal with the emergent complexity of fluid ever-changing social systems. This difficulty is both due to our own inability to comprehend the crushing complexity of reality and its always-changing nature. Hence, to do philosophy and conceptual research at this level of abstraction, there are a few heuristics we need to remember [33]:

- Philosophy and conceptual research are an activity of creating concepts that help us understand the world.
- Concepts are not static, but are created through a process of experimentation and becoming.
- Hence, conceptual research and philosophy should be seen as a tool for creating new possibilities for thinking and acting.
- Such forms of thinking are not limited to academics or experts, but can be practiced by anyone.

- Any type of conclusion is never a finished product or a fixed system, but an invitation of an ongoing process of creating and exploring new concepts.

This methodology led to the insights and conclusions stated below. It does not mean that the taken perspective is privileged or special in any normative sense, other than, perhaps, as an invitation to think untimely things that connect obvious and not so obvious ideas, to both reinforce the thinking of the author and that of the reader. After all, there are some broad conceptual questions that, when approached empirically, easily get bogged down in the minutia and lose the original spark of inquiry. Hence, in terms of the method for the individual putting forward such propositions “means a process of scoping, comparison, reflection and abstraction [. . .], including defining concepts, comparing them, historical analysis, the construction of conceptual typologies, finding conceptual gaps, deep reflection, synthesising and finally a reconceptualisation of the subject” [34] (p. 45). The following account represents a re-telling of the findings of this process.

3. Research Findings

The results section consists of four different parts, each constituting one of the stated research objectives. The first section focuses on university teaching (Section 3.1). The second section focus on research conduct (Section 3.2). The third section focuses on funding success (Section 3.3) and the final section focuses on curriculum formation (Section 3.4).

3.1. University Teaching and Research Impact

The advancement of knowledge has and still is a common feature in many Western Higher Education traditions. Different national contexts have their specific interpretation of this aim. For example, John Henry Newman [35] argues for a British liberal education that shapes the character of the individual. Friedrich Schleiermacher [36] presents the German form of *Bildung* (literal translation: a form of becoming) as a formative experience for individuals that possess a scientific spirit. Jean-Jacques Rousseau [37] stressed that (French) education ought to be for the benefit of the individual and cautions against standardization (even describing it as harmful). James B. Conant [38] argues that US Higher Education should be accessible to all qualified students, regardless of their social or economic background, and that it should be focused on developing the scientific and technical skills needed to support national economic growth and innovation. Obviously, the above overview is neither representative nor exhaustive, yet what these different thinkers have in common is that they have an emphasis on the individual first and then usually stress any form of social benefit/impact secondarily.

Meanwhile, there are also educational reformers who mimic this individual focus, but put a lot more emphasis on the end-product/impact. Beatrice Webb [39] is an example here; she was a prominent social reformer and co-founder of the London School of Economics, as well as a member of the Fabian Society (a socialist organization). She advocated for social reform through gradual, democratic means, casting education as instrumental here. For Karl Marx [40], educational systems primarily represented a mechanism for how the dominant ruling class reproduces their social norms and are antithetical to fostering critical thinking and social change. Paulo Freire [41] argues in the *Pedagogy of the Oppressed* that any worthwhile educational mission has to have as one of its key aims the breaking down of oppressive hierarchical structures and colonial means of subjugation. Pierre Bourdieu [42] stresses that there are relationships between culture, power and social inequality, and that education can equip individuals with the necessary cultural capital to reduce and challenge such oppressive social hierarchies.

Obviously, these above-described positions are no neat categorizations of where one group of thinkers primarily focuses on the process and the other on the outcomes. The presented ideas are usually a lot more nuanced; nevertheless, it is clear where their emphasis lies and especially if they see the individual as merely instrumental in these larger social arrangements, or a worthwhile social end in and of itself. The famous debate between Jürgen Habermas and Niklas Luhmann encapsulates the nuances and complexities

of these opposing visions [43]. On the one hand Habermas argues that social consensus represents a final resting place, to derive social order from. Here, Higher Education is key to establishing a so-called ideal speech situation, which represents the mechanism of how to negotiate the proper ways of organizing society and reducing oppression [44]. Meanwhile, Luhmann rejects any of these pretences of stability and acknowledges that social complexity cannot be reduced, and always remains present (arguably as a self-replenishing reservoir of possibilities). All Higher Education can do is equip individuals with the fortitude to face this (over-whelming) complexity, which represents a pre-condition for the ability to deal with further evolution of social complexity [45].

If we, for the sake of simplification, call Habermas' side of the argument the end-product view and the Luhmann position the process view, we get a better understanding of the political nature of these types of debates. For example, the end-product view then characterizes choices about which literature constitutes part of the teaching canon as a political act. Here cries for 'decolonizing' the curriculum usually take this type of reasoning [46]. Meanwhile, individuals that depart from the process view usually stress that course literature only represents the entrance into a wider body of knowledge that the student subsequently ought to explore by themselves and come to their own conclusions. Arguments for heterodoxy in teaching and countering ideological biases usually take this form [47]. Such views cast political affiliations as subsequent individual choices disconnected from pedagogy and critical thinking. Perhaps, somewhat paradoxically, an emphasis of mainstream education on impact and student result, albeit usually interpreted in terms of employability aligns closer with the end-product view logic, rather than with the process view logic [48]. Speculatively, this may be one of the reasons why both Larry Fink and Greta Thunberg have become iconic for their focus on issues of climate change, albeit arguably, their views come from diametrically opposed political positions [49]. The first is the former CEO of an investment bank and the world's biggest asset manager BlackRock, whilst the latter is a climate activist and honorary theology doctorate holder of the University of Helsinki [50]. Such differences exist in the world, and understanding the subtleties and potential contradictions between *Lehrfreiheit* (freedom to teach) and *Lernfreiheit* (freedom to learn)—and how it relates to impact—represents part of what constitutes the "higher" in Higher Education [51].

3.2. University Research and Impact

Research matters, in the sense that in the Berlin university style model of *Bildung*, Higher Education represented an integral part of the process of pedagogy. This organizational model became the template for the modern university, in that the teachers and researcher are the same people [52]. Here the protestant reformation ensured that it became about a charismatic model of teaching. Charismatic, in the sense that the teachers who were most able to animate and inspire the future generation, then collected accolades and resources around them allowing them to grow their "brand" (to use an ill-fitting modern concept) [53]. One can interpret this type of success in two ways. In the first instance, such community excitement and congregation around common areas of interest can be seen as an establishment of a new moral economy, which highlights the relevancy of the research subject [54]. Here, a moral economy refers to a process focus of how support and dissent are operationally implemented in order to police community boundaries and establish parameters of expertise. This form of boundary work represents an unavoidable aspect of any type of research expertise [55]. Conversely, the other interpretation is exemplified by how Arthur Schopenhauer viewed Georg W. F. Hegel's success within this educational model. Schopenhauer had little love for Hegel's manifested end-goal focus; he viewed it as a servitude for the Prussian state and regarded Hegel's view as a philosophical rationalization and a misinterpretation of Kant. He writes that Hegel's views are "the height of audacity [...] and] a monument of German stupidity" [56] (p. 22).

This individual perspectivism is important because these types of views then codify themselves into the behavioural modes of what is and is not allowed within research

praxis. For example, Martin Heidegger writes that in order for one to have socially relevant research, it is important to be:

“[. . .] decisive if one is to lead is not just that one walk ahead of others, but that one have the strength to be able to walk alone, not out of obstinacy and a craving for power, but empowered by the deepest vocation and broadest obligation. Such strength binds to what is essential, selects the best, and awakens the genuine following (Gefolgschaft) of those who are of a new mind. **But there is no need to first awaken this following.** Germany’s student body is on the march. And whom it seeks are those leaders through whom it will to so **elevate its own vocation** that it becomes a grounded, knowing truth, and a place it into the clarity of interpretive and effective word and work.” [57] (p. 475, author’s emphasis).

Whilst the above quotation may appear noble and charismatic, knowledge of the historic context in which it was made and Heidegger’s affiliation to the German Nazi movement puts quite a different spin on the passages marked in bold and its end-product focus [58]. Furthermore, it is precisely in relation to what the purpose of a university, its research, its pedagogy, and social mission that became the focal point between the post war debate amid Heidegger and Karl Jaspers [59]. Heidegger’s position takes the end-product focus, meanwhile Jaspers is more concerned with the process and individual benefit. The impact agenda has recast this tension and throws up new contradictions in practice. Here, tensions between rationality, free will, scientific truth, and what role the university plays for the ontological possibilities of such concepts emerge [60]. Regardless of subjective feelings of what stance one takes on these subjects in terms of personal preference, there seems to be a shift in the overarching academic norms, towards the performative production of the end-goal/impact focus [61].

Some scholars regard this shift in academic norms and conduct as a form of epistemic corruption [62]. However, what is often less clear is that if this does indeed represent a form of corruption; what are its consequences and what are the reasons of why people engage with it in the first place? In terms of consequences, it might be overly speculative and sensationalist to attribute a future rise of a technocracy solely with the impact agenda. Nevertheless, we do find that that scholars are pivotal catalysers for peaceful democratic co-emption and transition [63]. Furthermore, we can also see that research impact assessment represents a form of subtle coercion, where the very format of the assessment structure restricts what type of claims can and cannot be made [64]. Coercion in the sense, that research funding and assessment forces the representation of reality, epistemologically, into a linear story of research to impact that the scholars themselves know to be a simplified fiction [21]. When looking at the individual consequences, it seems clear that there are implications in terms of academic quality and scholarly motivation [65], in the sense that the logic of an impact claim can be different to the logic of research claims. Where the end-goal focus is about the maximization of significance and reach; the process focus does also stress social relevancy, whilst also emphasizing rigor and originality [2].

3.3. University Funding Success and Research Impact

The rise in research impact metrics represents a substantial shift in academic practice and what counts as successful. Subsequently, these very metrics and their incentivized behaviour then become the hallmarks for what counts as academic success [66]. The issue with judging the validity of knowledge claims at the research edge, is that it presupposes that the assessor has the required competency and knowledge to make such claims in the first place. With an increase in specialization and a constantly growing field of research expertise, this is increasingly less and less the case, and hence the requirement for trust becomes ever greater [67]. Therefore, metrics and outcome judgements become a convenient shorthand for determining the quality of research, albeit there is an acknowledgment that research output quality and research impact do not have to have a causal link [19]. Subsequently, as rankings fulfil this convenient simplification function, they persist. This is

despite all their adverse consequences in relation to the process of knowledge creation and apparent methodological flaws in showcasing what they intend to measure [68].

From an end-goal perspective, this very circumstance gets a different interpretation. Namely, that the achievement of funding success, in terms of research income generation, impact and other metrics, is indeed a sign of research quality. The argument is as follows, in the sense that if there were not any relevance to the research then no funding, networks or change would manifest. Indeed, on a surface level, this characterization does seem to coincide with the so-called Matthew effect [69], whereby successful researchers become even more successful, while less successful researchers struggle to gain recognition. Nevertheless, such an outcome focus as a hallmark of success oftentimes bears little resemblance to the dynamics of research at the knowledge edge [70]. The issue with the Matthew effect is that it is a self-reinforcing holistic process that is uncritical towards its own initial and boundary conditions. In other words, success and access to resources is the only aspects that counts for the differential potential for the Matthew effect to start. Put bluntly, Nazi Germany or Communist China could perfectly well allocate resources meritocratically based on arguments of research impact.

The problem that arises within a research context is very peculiar to that context. In the sense that every new insight, every new way of doing something will, by definition, start off from an individual, and hence occupy a marginal position. However, the research process does not occur in a vacuum, and is influenced by all sorts of powerful external factors [71]. Here, from a process focus that values originality as a hallmark of quality, this is a problem. From an end-point focus that values the impact of a supposed research claim, this is an inconvenient rhetorical detail, best avoided by affiliating oneself with already established research/political/social agendas [72], the total outcome of which is that the status quo is reinforced and no genuine innovation occurs.

Admittedly, there will always be noise in the signal, in the sense that just because a claim is new does not logically imply that it is beneficial or useful. In fact, it is very likely that this is not the case. Hence, there is a necessity for a filtering mechanism to be able to differentiate what is a genuine signal and what is noise. Traditionally, this function was indeed fulfilled by research funding bodies that rewarded original and basic research as the hallmark of success. However, an increasing shift towards the focus on research impact jeopardizes and muddles this function for new agendas [73]. What the overarching outcome of this dynamic is, as of yet, too early to tell. What is clear is that success is not easily encapsulated into a metricized approach that is insensitive to qualitative longitudinal changes [74].

3.4. *University Curriculum and Research Impact*

Putting the section on the university curriculum last in this walkthrough can appear as counter-intuitive, as in operational terms for pedagogical purposes, it is usually what comes first. It is the curriculum that steers and sets boundaries of what the Higher Education is meant to achieve, influencing what the student learns (and does not learn). Here, it appears last precisely to draw out the ingredients that go into curriculum formation, which are arguably largely influenced by the three previous sections and their subsequent conceptualization of what counts as success. Stephen Hill [75], the Head of Research England at the time, in his reflections on the introduction of research impact self-consciously acknowledges that; “these frameworks provide powerful incentives, with the potential to define the criteria of success for academic research.” (p. 3). Hill’s reflections use the concepts of mode 1 and mode 2 research, that roughly map onto the here-identified process and end-point focus, respectively [76]. He is somewhat underestimating the enormous knock-on effects such decisions have for university bureaucracy and the curriculum. It is underappreciated because these two approaches presuppose different modes of pedagogy, and the evaluation of what is best, and emphasize different strengths and weaknesses.

Lee and Walsh [77] argue that the focus on “metrics push[es] scientists to prioritize the research questions that get them a large number of publications and citations, over

what is an interesting [insight . . . and . . .] scientific progress" (p. 1073). Here, the progress is inhibited as the younger generation is alienated and forced on specializing too early, not given the chance (nor guidance) to develop their own unique view on reality. Max Weber [78], in his classic essay on science as a vocation agrees, arguing that treating science as a cold and calculated enterprise is indeed a misconception, devaluing and distorting its actual process. He writes:

"Nowadays in circles of youth there is a widespread notion that science has become a problem in calculation, fabricated in laboratories or statistical filing systems just as "in a factory," a calculation involving only the cool intellect and not one's "heart and soul". First of all one must say that such comments lack all clarity about what goes on in a factory or in a laboratory. In both some idea has to occur to someone's mind, and it has to be a correct idea, if one is to accomplish anything worthwhile. And such intuition cannot be forced. It has nothing to do with any cold calculation. (p. 135).

To be fair, such power struggles over who gets to decide the curriculum of the next generation are not distinctively new. Kant [79] wrote that the *Conflict of the Faculties* is a constant struggle for primacy that causes strife and can ultimately even fracture society. Hence, he argues that the philosophy faculty needs to reign supreme, as it has the public proclamation of truth as its function. His argument is complex, as it relates to the very ability of how to judge proper authority and how to create respect amongst a community of people representing divergent opinions. Whilst such considerations are still relevant today, a hitherto under-researched phenomenon is how bureaucratic staff of the university influence these intra-university conflicts regarding contestations of what constitutes scientific authority [80]. The objective of administrators and managers is often to do well in the remit of which they were employed to cater to evaluation systems [81], the overarching consequences then being that a system of checks and balances is created that steers research conduct and success to be in line with policy ambitions external to the university organization [82].

Michael Lipsky's [83] idea of street-level bureaucrats might be helpful here. He sees these individuals at the forefront of policy implementation, where they are the individuals that implement policy on a one-to-one basis, being key in their overarching success, but oftentimes lacking the wider appreciation and understanding of what impact their actions have collectively. It might be counter-intuitive to classify university leadership, professors, or world-leading researchers as novices, or, as implied above, as street-level bureaucrats, but that is often precisely what they are when they do not take student needs into consideration [84]. Conversely, only catering to student demands does not account for pedagogical challenges to students' simplifications in terms of epistemology, the adjustment of which is troublesome, to put it mildly [85]. Hence, it is still possible to rise through the ranks of the system on the merits of their subject expertise. Nevertheless, it is often to them that it falls to write curricula and design the pedagogical setting, which they do, departing from their own knowledge of how they rose through the ranks. Here the assumptions are that their impact merits are what will make their students successful as well. There are many flaws in such an assumption, not least as initial conditions differ. For example, their own enacted change from process to an end-goal focus in the curriculum being one active ingredient of why the initial conditions have changed.

4. Discussion

The first section of the discussion deals with the last research objective of this conceptual paper, that looks at Higher Education holistically and highlights the intergenerational feedback loop (Section 4.1). The second section explicitly addresses some of the limitations that arise at the level of the abstraction of the discussion (Section 4.2).

4.1. The Intergenerational Cycle of Higher Education

As we saw in the previous sections, university teaching faces constraints in terms of what university purposes are articulated in terms of a focus on the process or end-results. The individuals that become successful from the pool of possible students then succeed due to a multitude of different factors that represent a blend of focus on end-results (i.e., social relevance) and process (i.e., rigor). For example, the availability of resources for research is conditioned by external factors that have little to do with the internal hierarchy and knowledge conflicts, yet are shaping and influencing them. In the sense, that the individuals who successfully managed to navigate the system and then occupy positions of leadership in one capacity or another then also become the key levers who decide the curriculum for the next generation. Figure 1 below showcases how curriculum change manifests through and intergenerational cycle within Higher Education.

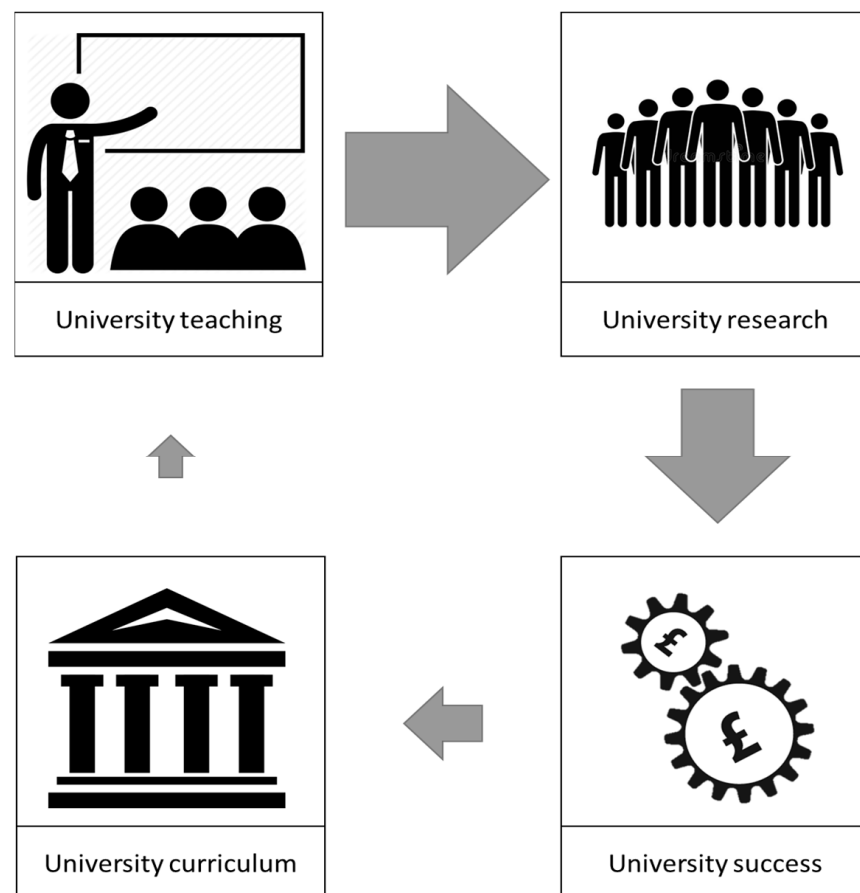


Figure 1. Model of how Higher Education pedagogy changes through an intergenerational cycle.

Each stage (starting from the top left corner) represents an evolutionary filtering process, where less and less people pass to the next stage. The opinions and understanding of such individuals become more and more pronounced in the effect they have on the institutions' direction. For example, whilst not all university graduates participate within the research process, some will (top right corner). Nonetheless, the disciplinary requirements within the research process can be so gruelling and lacking in support that some individuals will simply stop researching. The contingency is made that the more pronounced, the more innovative and contrarian the individuals are, as the system can only recognize success, based on the already-established metrics of performance and impact being the most extreme form. Hence, only a subset will have success (bottom right corner), yet what success here means in impact terms is contingent upon the socio-political conditions of the time. Thereby, only a further (and smaller) subset will survive the institutional politics

and career progression necessary to be in a position of power to shape and influence the university curriculum (bottom left). Finally, only a subset of this “elite” will have the necessary charisma to then mainstream their ideas about reality, their ontological and epistemological presuppositions to the subsequent generations of students.

As such, if the individuals that rise through the ranks have an explicit focus on the end-product, this will subsequently manifest in the processes, support, and actions they promote in relation to university pedagogy and research culture. William Whewell, the individual who coined the term “scientist”, makes a very good point here, namely, that he distinguishes between the spirit of respect and spirit of criticism. His argument is that the latter can only manifest constructively under the umbrella of the former [86]. Without respecting the uncertainties of the process of knowledge production, not only is there potential for unintended consequences, but in general there is no distinction between research and politics. However, there needs to be a time and place where the proper manifestation of this spirit of respect can be learned. Concurrent arguments of a Western culture occupying a post-truth era indeed cast scientific knowledge production and university pedagogy in that light [87]. Given the mechanizations of the impact agenda and assessment, and the here-outlined potential for shifts in university curricula, there is a certain degree of merit to these considerations. Here, the danger is, as a sociologist of knowledge about a hundred years ago pointed out, that “crises affecting political thinking also become the crises of scientific thought” [88] (p. 34). This occurs because the moral fervour of the “true believer” represents the motor of any social movement (viz-a-viz impact), but also its biggest blind spot [89].

In contrast, the process focus for pedagogy has been famously coined as *the gift of the interval* [90], where students are given the opportunity to be free of the so-called *curse of Adam*, by which was meant the dreary considerations of the day-to-day drudgery, its complex power struggles, and trepidatious social etiquette [90]. This is very much the process focus in relation to impact. Where whatever societal outcome may be generated, it is secondary to the pursuit of scientific truth [91] and the focus on the benefit of the individual as a self-actualized contributor of knowledge to a specific academic discipline. Arguably, any other pretences about the instrumental role of a student’s pedagogy may then turn out to be that the emperor is nothing but clothes [92], because “[w]hen science denies its own depth in favor of pretending to the straightforward application of method and the production of information, it participates ironically in the anti-intellectualism it otherwise purports to combat” [93] (p. 309).

Put differently, the aspirational ambition for the benefit of the student is the only tangible difference that distinguishes education from indoctrination. Here, the process focus, due to its synergistic concern for the benefit of the individual and emphasis on reciprocity, may very well produce beneficial societal outcomes. However, if implemented under a heading of an end-goal focus, it destroys the very ability for critical thought and mutual discussion necessary to reach agreement of what constitutes benefit in the first place, even if this very conception may change in the future. Karl Popper [94] makes this very point. He described the scientific spirit of respect as an educational gift passed down over the generations as the very cornerstone of Western civilization and its scientific and parliamentary institutions. Arguably, albeit for religious reasons, the Moravians achieved and succeeded in their goal. It is questionable, if an end-goal educational focus on advocacy for climate change, gender equality, social justice, poverty eradication, anti-racism, etc., no matter how noble the intention may be, will cause detrimental consequences when the process focus on the individual gives way to these supposedly more important causes. The reason, from a position of authority open and legitimate criticism, can then be diverted and undermined as “unscientific”, as it does not align with someone’s impact ambitions.

4.2. Limitations

The level of abstraction of this discussion can be labelled as supercomplex [95]. What this means in practice, is that the finite limits of human comprehension become factors

in and of themselves in understanding and comprehending the system that is being described and interfered with. Here, we can distinguish between axiological, ontological, and epistemological limitations.

Axiologically, meaning in terms of values, the presented argument does not imply that end-goal-focused ambitions cannot be laudable, they may indeed be. However, there needs to be a standard by which this can be independently judged outside of it being self-legitimizing to constitute the category of scientific. Admittedly, this paper has not given proper space to elaborate why certain values, such as camaraderie, openness, criticality, universality, truthfulness, etc., are instrumental for the scientific enterprise [96]. Equally, the paper does not take a definitive stance on how the advancement of science and technological progress in general seems to be declining [97]. The here-described end-goal focus may play a pivotal role in this causality. However, the paper does not have the space to take a definitive stance on these matters. Lastly, axiologically, the process focus in and of itself can be cast as a form of radicalism/fanaticism, where its own end-goal is the advancement of scientific knowledge. The consequences and implications of this recursive dynamic have also been omitted for the sake of readability.

Ontologically, the dichotomy of the end-goal vs. process focus can readily be accused as a dichotomizing simplification. In practice, it may be more accurate to view these as a sliding scale [32]. Here, dichotomization is merely a rhetorical device to draw out complex issues of how scientific judgment functions, and is conditioned through the intergenerational cycle of Higher Education which is oftentimes ignored. Another associated limitation is the conscious choice of not attributing the above-described mechanics to market forces or neoliberalism as such. The reason for that is not to question these interpretations, but rather to highlight the structures and processes involving organizations, communities, and interactions that both enable, generate, and legitimize our Western capitalistic system in the first place [98]. Put differently, the way that academics and scholarly experts legitimize and argue for their own expertise becomes the template for how the wider society makes authoritative claims and resolves status conflicts factually/professionally. Thus self-evidently, there is a recursive influence of capitalism on Western academia and negative contingencies that need to be resisted [99], but there is also the reverse.

Epistemologically, denying that this dynamic exists would negate the whole concept of research impact and scientific expertise in general. The economy of academia and its disciplinary specific means of democratic authority may be a moral one, but it is an economy that has societal importance beyond its immediate utility claims/impact [100]. Hierarchically, for scientific truth claims then to have any tangible value, they need to precede any social, moral, political, ethical or other considerations (process > outcome). The limitation here is that this makes the category of scientific a self-fulfilling prophecy. Put differently, the self-correcting nature of the scientific enterprise only functions if people believe it does, the belief in which is inculcated into the scientific practitioner as an axiom and not so much an empirical observation, with the perception of scientific progress as its result. Alas, for narrative reasons there has not been enough space to give proper elaboration to this dynamic. Likewise, the distinction of why this is important for notions of scientific truth and how different research paradigms vary about the nuances have not been dealt with adequately in this paper for the reason of readability [101].

5. Conclusions

This conceptual paper propositioned that university teaching can cast students' Higher Education and prosperity as a goal in and of itself (process focus) or view them as instrumental for some other purpose (end-goal focus). The current research environment, under a heading of the impact agenda is putting an emphasis on the latter at the expense of the former, with explorative research being discouraged in favour of achieving specific social and environmental goals. This discrepancy then translates into a different promotion structure of what does and does not constitute research success, with the risk that only end-goal-focused individuals will remain successful and revamp the curriculum to align

with their impact ambitions, the unintended (or intended) outcome of which will then be that that Higher Education worthy of the name ceases to be instead of a mechanism of indoctrination masquerading as such. In other words, the “is/ought” division and its associated problems are not taught to the next generation, setting them up for a fall when they try to pursue the same end-goals in their own status battles.

The here-presented argument has obvious limitations and implies avenues for future research, the main limitation here being the potential perception of normativity and representing a categorical case. However, this may simply be a result of outlining a hitherto unforeseen problem and the complexity of the causality rather than being part of the argument put forth. Future research, both empirical and conceptual, should investigate if the outlined causality indeed has merit. In particular, empirically clarifying the longitudinal causality chains that a focus on process is a genuine way to ensure a beneficial societal impact of research. Arguably, operating at the edge of current knowledge is inherently apolitical (and amoral?) for two interconnected reasons: firstly, no established frameworks of reference exist to make adequate judgments; secondly, if current frameworks are applied uncritically, restricting the very process of thinking superciliously as the end-goal is already pre-determined. Manifested and re-interpreted through a pedagogical setting, the emphasis on process and student benefit over any other end-goal is the only distinguishing feature between education and indoctrination. Here, an uncritical acceptance of impact evaluation from an end-goal focus may unwittingly fuel the metaphorical fire of our post-truth era, where the “(over-)supply of knowledge and its politicization leads to de-legitimation of politics and loss of authority on the part of science” [102] (p. 160).

Funding: This research received no external funding.

Acknowledgments: The author would like to thank Prof Colin McCaig for his encouragement and guidance during the publication process. Similarly, the author would also like to thank the Bacchus Institute of Science reading group and the nollatutkijat (zero-impact) research group for the open and dialectical space for reflection. Many of the here articulated ideas, where first awkwardly verbalized in these interactions. Which re-affirms the authors belief that simplicity of articulation is an end-product of a long research process of complexity reduction, not its initial starting condition. Hence, by requiring an impact criteria at the beginning of the research process, the whole potential for research as a mechanism of trustworthy complexity reduction is unhinged.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Ingold, T. On building a university for the common good. *Phil. Theor. High. Educ.* **2020**, *2*, 45–68. [\[CrossRef\]](#)
2. Brauer, R.; Dymitrow, M.; Worsdell, F.; Walsh, J. What is the research impact of (the ideal of) scientific truth? *J. Educ. Cult. Soc.* **2021**, *12*, 113–136. [\[CrossRef\]](#)
3. Kant, I. *Ethical Philosophy: The Complete Texts of Grounding for the Metaphysics of Morals, and Metaphysical Principles of Virtue, Part II of the Metaphysics of Morals, with on a Supposed Right to Lie Because of Philanthropic Concerns*; Hackett Publishing: Indianapolis, IN, USA, 1994.
4. Hume, D. *A Treatise of Human Nature*; Courier Corporation: Chelmsford, MA, USA, 2003.
5. Engels, F.; Marx, K.; Plekhanov, G.V. *Ludwig Feuerbach and the End of Classical German Philosophy*; Electric Book Company: London, UK, 2001.
6. Bhaskar, R. *Philosophy and the Idea of Freedom*; Blackwell: Oxford, UK, 1991.
7. Martin, B.R. The Research Excellence Framework and the ‘impact agenda’: Are we creating a Frankenstein monster? *Res. Eval.* **2011**, *20*, 247–254. [\[CrossRef\]](#)
8. Laing, K.; Mazzoli Smith, L.; Todd, L. The impact agenda and critical social research in education: Hitting the target but missing the spot? *Policy Futures Educ.* **2018**, *16*, 169–184. [\[CrossRef\]](#)
9. Barnett, R.; Peters, M.A. *The Idea of the University: A Reader, Volume 1*; Peter Lang: Bern, Switzerland, 2018.
10. Kotzee, B. The epistemic goods of higher education. *Phil. Inq. Educ.* **2018**, *25*, 116–133. [\[CrossRef\]](#)
11. Fulford, A. Education: Expectation and the unexpected. *Stud Philos. Educ.* **2016**, *35*, 415–425. [\[CrossRef\]](#)
12. Rogers, B.; Swain, K. Teaching academics in higher education: Resisting teaching at the expense of research. *Aust. Educ. Res.* **2022**, *49*, 1045–1061. [\[CrossRef\]](#)
13. Barnett, R. The activist university: Identities, profiles, conditions. *Policy Futures Educ.* **2021**, *19*, 513–526. [\[CrossRef\]](#)

14. Brauer, R.; Dymitrow, M.; Tribe, J. A wider research culture in peril: A reply to Thomas. *Ann. Tour. Res.* **2021**, *86*, 103093. [CrossRef]
15. Barnett, R. *The Philosophy of Higher Education: A Critical Introduction*; Routledge: Abingdon, UK, 2021.
16. Smith, S.; Ward, V.; House, A. 'Impact' in the proposals for the UK's Research Excellence Framework: Shifting the boundaries of academic autonomy. *Res. Policy* **2011**, *40*, 1369–1379. [CrossRef]
17. Crawford, A. Societal impact as 'rituals of verification' and the co-production of knowledge. *Br. J. Criminol.* **2020**, *60*, 493–518. [CrossRef]
18. Tsey, K.; Onnis, L.A.; Whiteside, M.; McCalman, J.; Williams, M.; Heyeres, M.; Lui, M.S.; Klieve, H.; Cadet-James, Y.; Baird, L.; et al. Assessing research impact: Australian Research Council criteria and the case of Family Wellbeing research. *Eval. Program Plan.* **2019**, *73*, 176–186. [CrossRef] [PubMed]
19. Lewandowska, K.; Kulczycki, E. Academic research evaluation in artistic disciplines: The case of Poland. *Assess. Eval. High. Educ.* **2022**, *47*, 284–296. [CrossRef]
20. Geschwind, L.; Broström, A. To be or not to be a technical university: Organisational categories as reference points in higher education. *High. Educ.* **2022**, *84*, 121–139. [CrossRef]
21. Lauronen, J.P. The epistemic, production, and accountability prospects of social impact: An analysis of strategic research proposals. *Res. Eval.* **2022**, *31*, 214–225. [CrossRef]
22. Lehmann, H.; Melton, J.V.H.; Strom, J. "Don't Teach My Negroes to Be Pietists:" Pietism and the Roots of the Black Protestant Church. In *Pietism in Germany and North America 1680–1820*; Routledge: London, UK, 2016; pp. 193–208.
23. Richards, H. Distant garden: Moravian missions and the culture of slavery in the Danish West Indies, 1732–1848. *J. Morav. Hist.* **2007**, *2*, 55–74. [CrossRef]
24. Wilberforce, W. *An Appeal to the Religion, Justice, and Humanity of the Inhabitants of the British Empire: In Behalf of the Negro Slaves in the West Indies* (No. 83); J. Hatchard and Son: London, UK, 1823.
25. Oldfield, J.R. *Popular Politics and British Anti-Slavery: The Mobilisation of Public Opinion against the Slave Trade 1787–1807*; Routledge: London, UK, 2012.
26. Kuhn, T.S. *The Structure of Scientific Revolutions*; University of Chicago Press: Chicago, IL, USA, 2012.
27. Brauer, R.; Dymitrow, M. Quality of life in rural areas: A topic for the Rural Development policy? *Bull. Geogr. Socio-Econ. Ser.* **2014**, *25*, 25–54. [CrossRef]
28. Brauer, R. *What Research Impact? Tourism and the Changing UK Research Ecosystem*; University of Surrey: London, UK, 2018.
29. Brauer, R. Tourism studies and the changing research ecosystem. *Tour. Recreat. Res.* **2023**, 1–11. [CrossRef]
30. Nietzsche, F. *Beyond Good and Evil*; Penguin Random House: New York, NY, USA, 1989.
31. Haraway, D.J. Situated knowledges: The science question in feminism and the privilege of partial perspective. *Fem. Stud.* **1988**, *14*, 575–599. [CrossRef]
32. DeLanda, M. *A New Philosophy of Society: Assemblage Theory and Social Complexity*; Bloomsbury Publishing: London, UK, 2019.
33. Deleuze, G.; Guattari, F. *What Is Philosophy?* Columbia University Press: New York, NY, USA, 1994.
34. Xin, S.; Tribe, J.; Chambers, D. Conceptual Research in Tourism. *Ann. Tour. Res.* **2013**, *41*, 66–88. [CrossRef]
35. Newman, J.H.; Landow, G.P.; Newman, J.E.; Turner, F.M.; Garland, M.M.; Castro-Klaren, S. *The Idea of a University*; Yale University Press: London, UK, 1996.
36. Schleiermacher, F. Occasional Thoughts on Universities in the German Sense. In *Platon. Sämtliche Werke Band 2*; Reimer: Berlin, Germany, 1991; Volume 3, pp. 537–644.
37. Rousseau, J.J. *Emile, or on Education*; Basic Books: New York, NY, USA, 1979.
38. Conant, J.B. *The Education of American Teachers*; McGraw-Hill: New York, NY, USA, 1963.
39. Webb, B. *The Co-Operative Movement in Great Britain*; Longmans, Green, and Co.: London, UK, 1891.
40. Marx, K. *Capital: Volume I*; Penguin: London, UK, 2004.
41. Freire, P. *Pedagogy of the Oppressed*; Bloomsbury Publishing USA: New York, NY, USA, 2018.
42. Bourdieu, P. *Homo Academicus*; Stanford University Press: Redwood City, CA, USA, 1988.
43. Rasch, W. Theories of complexity, complexities of theory: Habermas, Luhmann, and the study of social systems. *Ger. Stud. Rev.* **1991**, *14*, 65–83. [CrossRef]
44. Habermas, J. *Communication and the Evolution of Society*; Beacon Press: Boston, MA, USA, 1979.
45. Luhmann, N.; Lenzen, D. *Das Erziehungssystem der Gesellschaft (Vol. 1593)*; Suhrkamp: Frankfurt am Main, Germany, 2002.
46. Winter, J.; Webb, O.; Turner, R. Decolonising the curriculum: A survey of current practice in a modern UK university. *Innov. Educ. Teach. Int.* **2022**, 1–12. [CrossRef]
47. Duarte, J.L.; Crawford, J.T.; Stern, C.; Haidt, J.; Jussim, L.; Tetlock, P.E. Political diversity will improve social psychological science1. *Behav. Brain Sci.* **2015**, *38*, e130. [CrossRef] [PubMed]
48. Rustin, M. The neoliberal university and its alternatives. *Sound. Spaces Resist.* **2016**, *63*, 147–170. [CrossRef]
49. Financial Post. Ex-BlackRock Executive on Larry Fink, Greta Thunberg and Why ESG Won't Save Us. 2021. Available online: <https://archive.ph/I5j71> (accessed on 2 May 2023).
50. Daily Caller. Greta Thunberg to Receive Honorary Doctorate Degree in Theology From University of Helsinki. 22 March 2023. Available online: <https://archive.ph/xKLDt> (accessed on 4 April 2023).
51. Karran, T. Academic freedom: In justification of a universal ideal. *Stud. High. Educ.* **2009**, *34*, 263–283. [CrossRef]

52. Anderson, R.D. *European Universities from the Enlightenment to 1914*; Oxford University Press: Oxford, UK, 2004.
53. Fuller, S. The genealogy of judgement: Towards a deep history of academic freedom. *Br. J. Educ. Stud.* **2009**, *57*, 164–177. [CrossRef]
54. Kohler, R.E. *Lords of the Fly: Drosophila Genetics and the Experimental Life*; University of Chicago Press: Chicago, IL, USA, 1994.
55. Gieryn, T.F. Boundary-work and the demarcation of science from non-science: Strains and interests in professional ideologies of scientists. *Am. Sociol. Rev.* **1983**, *48*, 781–795. [CrossRef]
56. Schopenhauer, A. *The World as Will and Representation*; Kegan Paul, Trench, Trübner & Co.: London, UK, 1909; Volume 2.
57. Heidegger, M.; Harries, K.; Heidegger, H. The self-assertion of the German University: Address, delivered on the solemn assumption of the rectorate of the University Freiburg the rectorate 1933/34: Facts and thoughts. *Rev. Metaphys.* **1985**, *38*, 467–502.
58. Brauer, R.; Dymitrow, M. The Greater/Public Good and Research Impact. In Proceedings of the Symposium on the Public Good, Aarhus, Denmark, 28 March 2023. Available online: <https://pathes.org/symposium-higher-education-as-a-public-good/> (accessed on 2 May 2023).
59. Burwood, S. Karl Jaspers (1883–1969): Truth, Academic Freedom and Student Autonomy. In *Philosophers on the University*; Barnett, R., Fulford, A., Eds.; Springer: Berlin/Heidelberg, Germany, 2020; pp. 137–148.
60. Shields, R.; Watermeyer, R. Competing institutional logics in universities in the United Kingdom: Schism in the church of reason. *Stud. High. Educ.* **2020**, *45*, 3–17. [CrossRef]
61. Macfarlane, B. The neoliberal academic: Illustrating shifting academic norms in an age of hyper-performativity. *Educ. Philos. Theory* **2021**, *53*, 459–468. [CrossRef]
62. Kidd, I.J.; Chubb, J.; Forstenzer, J. Epistemic corruption and the research impact agenda. *Theory Res. Educ.* **2021**, *19*, 148–167. [CrossRef]
63. Kratou, H.; Laakso, L. The impact of academic freedom on democracy in Africa. *J. Dev. Stud.* **2022**, *58*, 809–826. [CrossRef]
64. Bandola-Gill, J.; Smith, K.E. Governing by narratives: REF impact case studies and restrictive storytelling in performance measurement. *Stud. High. Educ.* **2021**, *47*, 1857–1871. [CrossRef]
65. Chubb, J.; Reed, M.S. The politics of research impact: Academic perceptions of the implications for research funding, motivation and quality. *Br. Politics* **2018**, *13*, 295–311. [CrossRef]
66. Muller, S.M. *The Incentivised University*; Springer: Berlin/Heidelberg, Germany, 2021.
67. Hardwig, J. The role of trust in knowledge. *J. Philos.* **1991**, *88*, 693–708. [CrossRef]
68. Hamann, J.; Ringel, L. The discursive resilience of university rankings. *High Educ.* **2023**, 1–19. [CrossRef]
69. Rigney, D. *The Matthew Effect: How Advantage Begets Further Advantage*; Columbia University Press: New York, NY, USA, 2010.
70. Yang, S.; Zheng, M.; Yu, Y.; Wolfram, D. Are Altmetric. com scores effective for research impact evaluation in the social sciences and humanities? *J. Informetr.* **2021**, *15*, 101120. [CrossRef]
71. MacLeavy, J.; Harris, R.; Johnston, R. The unintended consequences of Open Access publishing—And possible futures. *Geoforum* **2020**, *112*, 9–12. [CrossRef]
72. Chatterjee, B.; Cordery, C.J.; De Loo, I.; Letiche, H. The spectacle of research assessment systems: Insights from New Zealand and the United Kingdom. *Account. Audit. Account. J.* **2020**, *33*, 1219–1246. [CrossRef]
73. Guthrie, S.; Grant, J. Culture, Performance, and Assessment in Research. 2021. Available online: <https://archive.is/u2Q3p> (accessed on 2 May 2023).
74. Woolcott, G.; Keast, R.; Pickernell, D. Deep impact: Re-conceptualising university research impact using human cultural accumulation theory. *Stud. High. Educ.* **2020**, *45*, 1197–1216. [CrossRef]
75. Hill, S. Assessing (for) impact: Future assessment of the societal impact of research. *Palgrave Commun.* **2016**, *2*, 16073. [CrossRef]
76. Nowotny, H.; Scott, P.; Gibbons, M. Introduction: “Mode 2” revisited: The new production of knowledge. *Minerva* **2003**, *41*, 179–194. [CrossRef]
77. Lee, Y.N.; Walsh, J.P. Rethinking science as a vocation: One hundred years of bureaucratization of academic science. *Sci. Technol. Hum. Values* **2022**, *47*, 1057–1085. [CrossRef]
78. Weber, M. Science as a Vocation. *Daedalus* **1958**, *87*, 111–134.
79. Kant, I. *The Conflict of the Faculties = Der Streit der Fakultäten*; University of Nebraska Press: Lincoln, NE, USA, 1992.
80. Brauer, R.; Dymitrow, M. (forthcoming). Solidarity and the Kafkaesque Administrative Apparatus of the University. PATHES: Solidarity and the University. Available online: <https://solidarityanduniversity.ug.edu.pl/> (accessed on 2 May 2023).
81. Shore, C.; Wright, S. Audit culture and anthropology: Neo-liberalism in British higher education. *J. R. Anthropol. Inst.* **1999**, *5*, 557–575. [CrossRef]
82. Shore, C.; Wright, S. Governing by numbers: Audit culture, rankings and the new world order. *Soc. Anthropol./Anthropol. Soc.* **2015**, *23*, 22–28. [CrossRef]
83. Lipsky, M. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Service*; Russell Sage Foundation: New York, NY, USA, 2010.
84. McAlpine, L.; Weston, C. Reflection: Issues related to improving professors’ teaching and students’ learning. In *Teacher Thinking, Beliefs and Knowledge in Higher Education*; Springer: Berlin/Heidelberg, Germany, 2002; pp. 59–78.
85. Meyer, J.H.; Land, R. Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *High. Educ.* **2005**, *49*, 373–388. [CrossRef]
86. Whewell, W. *On the Principles of English University Education*; John W. Parker: London, UK, 1838.
87. Fuller, S. *Post-Truth: Knowledge as a Power Game*; Anthem Press: London, UK, 2018; Volume 1.

88. Mannheim, K. *Ideology and Utopia*; Routledge: London, UK, 2013.
89. Hoffer, E. *The True Believer*; Harper Perennial: New York, NY, USA, 2019.
90. Oakeshott, M. The Idea of a University. In *Academic Questions*; Winter 2003-04; Routledge: London, UK, 2003. Available online: https://www.cse.cuhk.edu.hk/irwin.king/_media/teaching/gen1113/scn_20090202113046_001.pdf (accessed on 2 May 2023).
91. Vattimo, G. *A Farewell to Truth*; Columbia University Press: New York, NY, USA, 2014.
92. Griffiths, A.P. A deduction of universities. In *Philosophical Analysis and Education*; Routledge: London, UK, 2009; pp. 127–140.
93. Porter, T.M. How science became technical. *Isis* **2009**, *100*, 292–309. [\[CrossRef\]](#)
94. Popper, K.R. *Conjectures and Refutations: The Growth of Scientific Knowledge*; Basic Books: New York, NY, USA, 1962.
95. Barnett, R. Supercomplexity and education research: Six scholarships. In *Emerging Methods and Paradigms in Scholarship and Education Research*; IGI Global: Hershey, PA, USA, 2020; pp. 231–243.
96. Merton, R.K. *The Sociology of Science: Theoretical and Empirical Investigations*; University of Chicago Press: Chicago, IL, USA, 1973.
97. Park, M.; Leahey, E.; Funk, R.J. Papers and patents are becoming less disruptive over time. *Nature* **2023**, *613*, 138–144. [\[CrossRef\]](#)
98. Brankovic, J.; Ringel, L.; Werron, T. Spreading the gospel: Legitimizing university rankings as boundary work. *Res. Eval.* **2022**, *31*, 463–474. [\[CrossRef\]](#)
99. Berg, M.; Seeber, B.K. *The Slow Professor: Challenging the Culture of Speed in the Academy*; University of Toronto Press: Toronto, ON, Canada, 2016.
100. Collins, H.; Evans, R. *Why Democracies need Science*; John Wiley & Sons: Hoboken, NJ, USA, 2017.
101. Guba, E.G.; Lincoln, Y.S. Competing paradigms in qualitative research. In *Handbook of Qualitative Research*; SAGE: Newcastle upon Tyn, UK, 1994; Volume 2, p. 105.
102. Weingart, P. Scientific expertise and political accountability: Paradoxes of science in politics. *Sci. Public Policy* **1999**, *26*, 151–161. [\[CrossRef\]](#)

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.