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PERSPECTIVE
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We Have Sent Ourselves to Iceland (With Apologies to Iceland): Changing the Academy From Internally-Driven to Externally Partnered

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In *Brave New World*, Aldus Huxley presented a dystopic vision of the world where global despotic power was maintained, in part, through isolating academics in Iceland. Current academic accountability is based on notions of excellence that reflect prestige. In governing itself based on excellence, I argue academia has metaphorically sent itself to Iceland, which has consequences for the relevance of academia toward sustainable development. Internally-driven academies are facing their own sustainability issues, as more students are trained for too-few professor positions, and must find work in other fields with inadequate training. Academic measures of excellence attempt to reflect merit but perpetuate pre-conceived notions of prestige, which is discriminatory, contributes to intellectual gate-keeping, and distracts from research rigor and policy relevance. Measures of excellence fail to translate to real-world impact in three important ways: academic reviews that accounts for prestige lead to poor and biased predictions of outcomes of research projects; prestigious individuals are not more reliable experts than less prestigious individuals (and may be more overconfident); prestigious institutions are not more likely to contribute to sustainable development outcomes than less prestigious institutions. It is time to drop academic notions of excellence and turn toward external partnerships, where academic institutions can focus more on real-world impact, train students for diverse careers, and allow academic research to focus on quality over quantity. For academia to be relevant to society, and to serve people graduating academic institutions, academia must proactively leave Iceland and rejoin the rest of the world.

Keywords: academic excellence, impact, sustainable development, policy engagement, science-policy, partnerships

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INTRODUCTION

In Iceland he will have small opportunity to lead others astray
-Aldus Huxley, *Brave New World*

In 1932, Huxley warned of a world where global despotic power was held, in part, by transporting potentially disruptive people, including intellectuals, artists, and academics, to Iceland (Huxley, 1932). In Iceland these disruptive elements could do as they please but have no influence on the rest of society. In reality, a lack of academic engagement in society can lead to a myriad

of problems, as problems that academics may be best suited to address are instead addressed by politically motivated individuals and organizations, and unengaged academic communities may create situations where ideas have limited exposure to testing and calibration in the real world (Williams, 2021). However, in the years since Huxley, we have entered a world where academia itself has metaphorically sent itself to Iceland without the need for a global despot.

Modern academia functions, in part, on the premise that it best serves society through research of academic interest, unbothered by political pressures and untethered to anything but the curiosity of its members (Pielke, 2010). The idea that academia best serves society when academia pursues topics of their own choosing, following their curiosity, and unconstrained by external political and societal actors, has shaped much of modern academia. Much of this idea can be traced back to 1945, when Vannevar Bush released the report "Science: the Endless Frontier" arguing that "research in the purest realms of science" best serves society by delivering on health, employment, and security (Bush, 1945). This report cemented the argument that "fundamental" research–that is, research unbridled by concerns of application–should be prioritized and valued over more "applied" research.

The impacts of this idea are wide-ranging and often ironic. Universities simultaneously promote their "fundamental" research programs while stating that they are committed to contribute to societal benefits and policy engagement–a recent estimate is that 80% of universities globally indicate policy engagement and societal contribution in their mandates (Singh et al., 2019). However, many modern universities rarely reward activities outside of research publications and awarded grants, even though most academics themselves do not see these activities as societally beneficial as teaching and policy engagement (Singh et al., 2019). Many indicators of university rank and status are primarily based on the quantity of scientific papers in top-ranked journals, the number of times someone is cited by other academics, and the size of an endowment, often fully focused on indicators valued by other academics and not society at large (Johnes, 2018). This circular nature of academic purview and incentives have had pernicious effects on who is part of academic culture, and creates self-reinforcing notions of "impact" and "benefit" of academies.

Yet sustainable development, a key framing for explaining a "desirable future", and often defined by global initiatives such as the Sustainable Development Goals, requires academic involvement. How can academic institutions, especially the disciplines that work most closely on socioeconomic dimensions, best contribute to sustainability? The current internally-driven mechanisms of academia increasingly raise questions about its relevance to sustainable development initiatives. Here I argue that academia can only contribute to a sustainable future by confronting its internal accountabilities and changing them toward external partnerships.

UNSUSTAINABLE ACADEMIES

Academia has been described as the last vestige of European medieval guild systems (Ben-David and Zloczower, 1962; Macfarlane and Jefferson, 2022). As part of this guild-based system, academic education involves the training of pupils (students and post-doctoral researchers) in order to replace masters (professors), which often recruits and trains apprentices from the same socioeconomic backgrounds as the masters. Indeed, this social reproduction of academic cultures and institutions is sometimes called "academic inbreeding" and is an outgrowth of European class systems (Macfarlane and Jefferson, 2022). This model faces numerous demographic challenges that challenge the long term sustainability of academia, and academia's impact on society.

Modern academies operate in an increasingly exclusive space, where the number of academic appointments has stagnated but the number of PhD holders vying for academic appointments has grown (Larson et al., 2014; Roach and Sauermann, 2017). In many countries, public investment in higher education has also stagnated or declined, resulting in more universities relying on greater enrolment (and international students) for funding (King and Sen, 2013; Busch, 2017; Mitchell et al., 2017). While this trend has led to more students getting an education, the focus of training and learning on narrow academic topics (especially at the graduate level) further aggravates the demographic squeeze that modern academia presents for career opportunities (Macfarlane and Jefferson, 2022). Given that there are nowhere near enough positions to accommodate the number of doctorates, many need to find employment elsewhere, often with substandard training in areas outside academic settings.

But it is not only the narrow training offered by academia that affects younger generations; academic culture often instills a notion that only academic employment is worth pursuing (Schillebeeckx et al., 2013; Macfarlane and Jefferson, 2022). This pressure and instilled value set leads to many people spending a considerable amount of their career working toward increasingly-competitive faculty positions they may never achieve, instead of working in rewarding positions outside of academia. This academic culture, combined with an increasingly difficult academic job market, calls into question the ethics of academia rewarding its members for their students landing academic careers above others, as it incentives academics to push their students to careers that they may never have a chance of obtaining.

As hinted above, the European guild model of academia presents another demographic problem: the over-representation of specific demographics that run and direct academies. Academia is a very narrow band of society, from the perspective of race, socioeconomic background, gender, physical ability, and other underrepresented groups, particularly at higher ends of academic hierarchies (Fradella, 2018; Wedekind et al., 2021). This lack of demographic diversity has been credited with the persistent hiring biases in academia: biasing who is alerted to opportunities, biasing the assessment of individual's performance and impact, biasing the evaluation of research proposals, and

even biasing the "fit" of individuals to existing academic programs which often lead to prejudiced hiring against racially and gender diversity (Law and Corrigan, 2018; Singh, 2018; Corrigan and Vats, 2020; Heffernan, 2021). Beyond hiring, this narrow band of society has created a system of excellence that is almost entirely accountable to its own membership.

ACADEMIC EXCELLENCE AND SUSTAINABLE DEVELOPMENT

Addressing the demographic challenges and biases of academia while maintaining the emphasis on rewarding "excellence" may be difficult, especially if current academic systems are successful in recognizing and promoting people and institutions that can best contribute to societal benefits. How would excellence be maintained? However, if current academic systems of excellence do not translate into societal benefit, then there may not be a trade-off between academic inclusion and excellence, and addressing the unsustainability of academic institutions can also provide an opportunity to reassess what excellence is and how academic institutions contribute to society.

Does academic excellence translate into sustainable development outcomes? To explore this question, I compared academic measures of excellence with measures of institutional impact toward the SDGs. The SDGs are a globally-agreed on definition of sustainable development (agreed on by all United Nations member states), and cover broad social-ecological-technological dimensions (Singh, 2020). To measure academic excellence, I relied on a database of global university ranks. University ranks are globally recognized measures of academic institutional excellence. Specifically, I downloaded data of global university rankings based on excellence as well as university ranks based on contribution to the Sustainable Development Goals, as collated by the Times Higher Education for the years 2019-2021 (the years for which data is available, see **Supplementary Materials**). Times Higher Education collects yearly data across more than 1,600 academic institutions to rank them, based on indicators of teaching, research, citations, international outlook, and industry income. The bulk of the university excellence scores and ranks (90%) come from teaching, research, and citation, and over half of the teaching and research scores are based on reputation surveys. I also collected data from Times Higher Education for their Impact Rankings, which are supposed to measure global universities' ability to contribute to the UN SDGs. These ranks are scored based on indicators across four broad areas: research, stewardship (treatment of physical and social resources), outreach, and teaching.

It is important to note that the teaching category isn't used in all 17 SDG ranks, and that there is overlap between the World University Ranks and the Impact Ranks (mostly in how "research" is measured–counting numbers of papers in "top" journals). However, the Impact Rankings also reflect university contributions to real world outcomes, such as reporting the amount of recycled waste (for SDG 12–Responsible Consumption and Production) and having interventions to prevent hunger in students (for SDG 2–Zero Hunger). The educational components of the Impact rankings often relate to outreach, such as educational programs on aquatic ecosystems for local and other communities (for SDG 14–Life Below Water). The Impact Rankings include an "overall ranking" combining scores across all 17 SDG areas. Universities supply their own data toward the ranking, so I assume that universities that submit data toward SDG ranks care about their commitments toward the SDGs. Conversely, many universities have not submitted data toward SDG impact rankings (despite simultaneously holding societal impact as important in their institutional mandates), making it hard to assess their commitment to sustainable development, so I do not include an assessment of them.

I conducted Spearman correlation tests (correlation test for rank data) on the ranking pairs between University prestige rank and rank toward a given SDG. I relied on an alpha value of 0.05 to determine if correlations were significant. For more information about the data and the analysis conducted (including what data was included, how the data was analyzed, and specific results for 2019–2020), see the **Supplementary Materials**.

I found that academic excellence (as measured by the University Ranking) has no relationship with the Times Higher Education rank of SDG impact, across any of the SDG dimensions in any year (**Figure 1**, **Supplementary Figures S1**, **S2**). These results are surprising because the measure of world university rank and world SDG impact rank share some metrics (publications in high impact journals), so this should bias toward finding a positive relationship between the two. However, given that so much of modern academia's assessment of excellence is based on exclusion and insulation from society, perhaps it is not surprising that modern academia's internally driven metrics of excellence do not translate to broader society's goals (Blackmore, 2015).

THE REIFICATION OF EXCELLENCE: INTERNALLY–DRIVEN ACADEMIES

While the increasingly competitive landscape of academic jobs may negatively influence individuals, and may not translate to sustainable development outcomes at an institutional level, an argument is often put forward that the competitive landscape ensures that academia is led by the best of the best individuals who can contribute their scholarship to benefit society. Competition should ensure that modern academies are hiring and promoting those who demonstrate and promise the greatest contributions toward academic excellence (Deem et al., 2007). However, if academia is truly recognizing the best, why are effects not being realized at institutional levels? To hold the position that modern academia recognizes the best assumes we know not only what academic excellence is, but also how to measure it.

Efforts to measure academic excellence have often revolved around publication and citation metrics, assuming that the number of peer-reviewed articles one writes and the number of times one is cited, is correlated with, if not a direct measure of a researcher's influence and excellence (Hicks et al., 2015). These measures are used to assess the merit of a

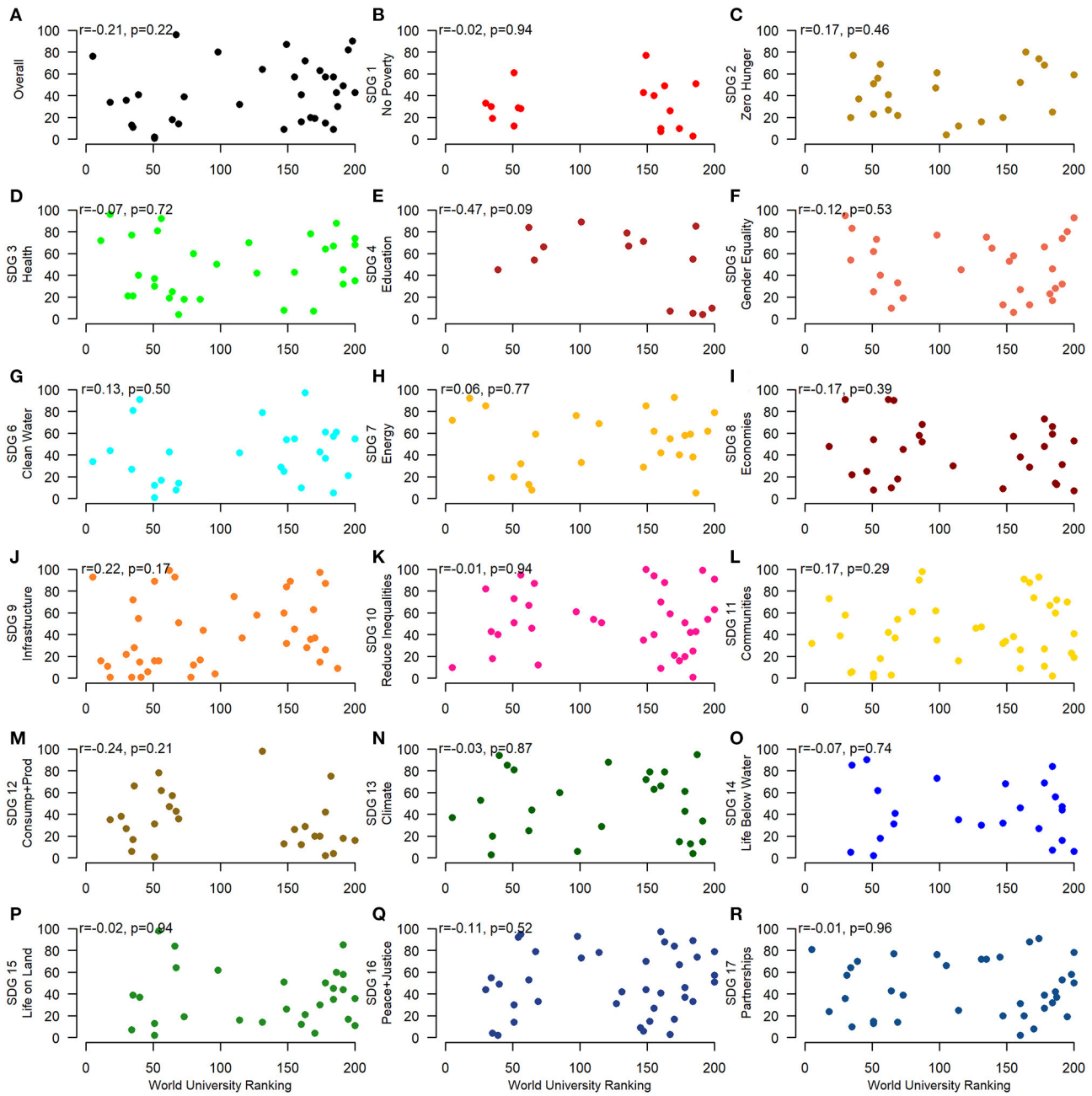

FIGURE 1 | The relationships between World University Ranks (a measure of prestige) and World Impact Ranks (contributions to the Sustainable Development Goals) in 2021. **(A)** the relationship between university rank and the "overall" SDG rank across all 17 SDG areas. **(B–R)** the relationships between world university rank and each individual SDG area, ordered by the 17 SDGs. Each point represents an individual university that has a precise ranking for both a world university ranking as well as an SDG impact ranking. The correlation strength (r), and the p-values are shown inset in each plot. Colors correspond to the colors of each specific SDG. No relationship shows significant association (all $p > 0.05$). Axes are scored by rank, so 1 is the best and larger numbers are worse.

researcher's hiring, promotion, grant awarding, and almost every important aspect of an academic's career. Aggregate statistics of citations also determine the excellence of an academic journal, as well as contribute to the standing of an academic institution.

However, citation metrics are replete with circular logics that belie notions of "excellence" or "merit". Since the 1960s, the sociologist of science Robert Merton showed that high academic citations are usually given to those already considered eminent (Merton, 1968). Called the "Matthew Effect" in

reference to a passage in the Gospel of Matthew describing the accrual of benefits to those who started ahead or accumulate advantage[1], this effect shows that recognition in academia is unequal and unfair, and instead of prestige and excellence being a reflection of citation and recognition, citations and recognitions are a result of pre-existing prestige. Modern studies have found this effect in contemporary bibliometrics and in funding (Larivière and Gingras, 2010; Bol et al., 2018). In this way, academic measures have built-in positive feedback systems, which are inherently unfair, unsustainable, and circular. Modern bibliometric analysis has shown other spinoff effects of how pre-existing prestige guides citation and publishing counts, as the "chaperone effect" shows there is a citation premium to publishing with prestigious authors: authors gain prestige simply by publishing with already prestigious authors (Sekara et al., 2018). These effects are a sample of the biased and automatic ways that prestige drives our measures of excellence rather than is a reflection of them. In addition, there are also egregious and deliberate ways in which prestige is used to affect academic outputs. Bibliometric analysis has revealed "citation cartels" among authors to inflate their citation metrics (Fister Jr et al., 2016), and editors at prestigious journals (whose prestige is determined by how often articles in their pages are cited) have admitted that they use name-prestige of authors as a key variable in determining what to publish (Vazire, 2017; Callier, 2018), meaning the journal benefits from the prestige of the authors, who benefit from the prestige of the journal. These self-reinforcing systems perpetuate demographic inequities. For an evaluation system originally built on a European guild model, academia's prestige-driven metrics of excellence have ensured that similar narrow demographics that dominated science a century ago dominate to this day (Thomson Jr et al., 2021).

The self-perpetuation of prestige is perhaps not surprising, when one realizes that academia has been trying to attach objective measures to subjective characteristics–a logical fallacy known as reification. What is academic "excellence"? What exactly is being rewarded? An entire literature has critically examined the construction of this term, and how it is modeled to benefit males, and particularly males of a specific race and class (Law and Corrigan, 2018; Corrigan and Vats, 2020; O'Connor and Barnard, 2021). More specifically, our concepts of excellence is built off of individuals who were credited as excellent in academia's past, which because of their social contexts valorized affluent white males (O'Connor and Barnard, 2021). Ironically, even though academic researchers today have outlined that the times that produced those "excellent" academics were incredibly discriminatory (filtering out potential excellent researchers and approaches to research from other genders, classes, and races), academic systems have not considered it problematic to use past researchers as the current model of excellence.

Academia's internal accountability and reified metrics, combined with insistence of academic benefits to broader society, has led to questions and investigations into academic evaluation and reward systems (Singh et al., 2019). Journal editor judgements of "interest" or "importance" of research can carry more weight than concerns of methodological rigor (Adam and Knight, 2002). Given the low demographic diversity of both authors and editors in academic publishing, one has to wonder exactly whose interest is being catered to. Here again, critical studies of academia highlights the way that academic thinking and writing faces gatekeeping to conform to interests and questions that cater to narrow demographic and cultural traditions, such as enshrining euro-centric notions of truth and setting standards for what is worthy of academic pursuit (Law and Corrigan, 2018). For example, black medical researchers in the USA receive less funding than their white colleagues because of, in part, the topics they are interested in studying–black researchers are more likely to propose research at the community level to directly study interventions while peer reviewers value "fundamental" research that try to tease out specific mechanisms behind medicine (Hoppe et al., 2019). This bias exists despite evidence that the intervention and community-based research was more influential–as measured by citation count–than the fundamental research (Hoppe et al., 2019). Arguments for fundamental research as more important than applied and community level research traces to white American and European scientists of the 19th century, and influences contemporary science and funding despite continuous critiques of the value of fundamental research and its importance to application and policy (Herrick and Sarewitz, 2000; Douglas, 2014). More practically, academic "interest" can often conflict with interests of practitioners and policymakers. For example, the US Global Change Research Program was set up to provide useable research and recommendations for developing mitigation and adaptation plans for climate impacts. Policymakers wanted evidence of effectiveness of policy options, but academic scientists involved were more interested in developing predictive models and understanding the mechanisms behind climate change. As a result the policy-usefulness of the work was limited (Sarewitz and Pielke Jr, 2007).

The revelation of so-called "replication crises" across broad areas of study, from psychology, economics, medical sciences, and others–where follow-up studies fail to replicate findings of peer-reviewed research–have called the credibility of internal-accountability models of research in question (Schooler, 2014; Loken and Gelman, 2017; Cockburn et al., 2020; Hou et al., 2020). Nonreplicable studies have also been found to be more cited than replicable ones, possibly because academic "interest" can supersede concerns of rigor (Serra-Garcia and Gneezy, 2021). While no accurate estimates of untrustworthy-yet-published research exist, some opinions run as high as 50% of peer-reviewed work being untrustworthy (Horton, 2015). As a measure of the credibility of the academic research system by people within that system, this is concerning. The

[1]For to everyone who has will more be given, and he will have abundance; but from him who has not, even what he has will be taken away.
— Matthew 25:29
Robert Merton is often solely credited with the idea of the Matthew effect, though he has admitted that his wife contributed equally to the idea's formation. This tendency to ignore the contribution of women and other genders to academic thought is not uncommon.

effects of untrustworthy work passing peer review at high rates are not benign: poor quality academic research can lead to bad decisions where academic research does connect with policy, and the potential growth of bad scholarship may increase the chances of bad or overconfidence decisions being made.

OUTCOMES OF ACADEMIC EXCELLENCE

Perhaps most damning, how academia predicts and rewards excellence does not reliably translate to outcomes academia itself considers important. In perhaps the most well-known studies, research on the relationship between peer-review scores of grant proposals from the National Institutes of Health and scientific output, as measured by citations and publications, reveals zero (or at best mild) association (Kaltman et al., 2014; Lauer et al., 2015). Some have responded to these findings by arguing that academic funding is random and more accurately considered a gamble rather than recognizing merit, so research funds should be allocated by lottery instead of peer review (Fang and Casadevall, 2016). Yet, despite the evidence that scientific practices do not work for their intended effect, the academic community continues to use peer review as some arbiter of excellence and merit. Even on issues where funding and rewards are supposed to address issues beyond academic excellence, such as "broader impacts" to society (such as used by the National Science Foundation in the United States), these impacts are assessed through the same academic peer review, which raises questions about the credibility of these "broader impacts" assessments (Sarewitz, 2011).

The body of literature about individual status and expert performance provides further critiques of the value of academic prestige, specifically in fields relevant for sustainable development. In a series of experiments assessing the predictive accuracy of socio-economic experts, subject-matter academic experts performed no better than non-academics (Tetlock, 2005). More strikingly, these experiments showed that logging more years of experience in a given academic field did not contribute to greater expert performance. Similarly, In a study of experts in environmental scientists, expert status was not found to correlate with expert performance (Burgman et al., 2011). Over a series of expert workshops in this latter study, those who were perceived to be more experienced and of greater prestige provided no better predictions than those considered more junior. Importantly, considering the aggregate predictions of a group often performed better than predictions of the highest regarded individual. Higher status academics may also be more likely to be overconfident about their predictions as overconfidence may actually contribute to academic status, which adds risks of relying on academic prestige since they will communicate greater confidence in their conclusions than are warranted (Kennedy et al., 2013).

In sum, academic prestige, or "excellence", fails to translate to real world outcomes at least three scales: excellence fails in assessing an individual academic's ability to provide expert advice, fails to predict the output of research programs, and fails to relate to an academic institution's contribution to desired societal outcomes.

I argue that we will never achieve truly objective measures of excellence because defining excellence is a subjective term; we will never achieve fair metrics when metrics are always subject to self-serving dynamics that favor certain groups and are based on past (unfair) models. Instead, attention should be paid to specific subjective interests academia is working in favor of. By turning away from the internally-driven enterprise that rewards those who are (or who associate with those who are) already prestigious, academia needs to anchor its progress on broader society.

FROM INTERNALLY-DRIVEN TO EXTERNALLY PARTNERED

To simultaneously address the growing demographic issues academia is facing, as well as the internally-driven and circular reward structure academia is built on, I propose a restructuring of what academia does and how it functions–particularly those segments of academia that focus on socioecological concerns and sustainable development. I propose that academia can only contribute to societal goals and provide employment opportunities beyond the stagnating current academic job market if academia focuses its impact externally. The research to action literature indicates that research best supports societal interests when it is done in the context of practical and policy problem solving (Sarewitz and Pielke Jr, 2007; Sarewitz, 2017). By assessing academia's impacts on society through metrics in the real world rather than internal peer review and citations, academia can calibrate its actions and commitments against the actual societal impacts academia has always claimed it contributes to Singh et al. (2021).

By transitioning away from a medieval guild model of masters and pupils toward a model of training for positions outside of the academy, academia can maintain a sustainable job environment (where replacement is done when needed) while transitioning students and mentees to other sectors that would benefit from academic training in assessing evidence and evaluating competing arguments.

Most university structures and incentive schemes push faculty away from engaging in policy, instead focusing on continued output of academic publishing (Singh et al., 2019). While academic publishing is important to showcase credibility within academia, published articles themselves can have very little influence outside of, and even within, the narrow domains of a given academic field–estimates of the proportion of uncited peer-review papers vary from 10 to 65% (Hamilton, 1990; Van Noorden, 2017). The ever growing list of peer reviewed journals and publications, while profitable to the lucrative academic publishing industry and individual academic careers, may squander public support and funding when not associated with policy processes (Sarewitz, 2017). Public discussions on the usefulness, value, and potential failures of academia toward society are already occurring (for example see

https://www.cbc.ca/listen/live-radio/1-23-ideas/clip/15871705-the-university-crisis), which may lead to further declines in public investment and supports. Changing academia to function on external partnerships would need incentive and review structures that account for actual policy engagement, such as contributions to policy initiatives, invitations to serve as advisors to policy processes, and having students who go on to roles that straddle the research-policy interface. By diversifying the range of academic outputs across diverse external partners, it would also decrease the number of papers and journals produced, which would allow papers to focus on quality rather than quantity, and potentially address the replication crises.

The guild approach to contribute to broader society largely neglects another broad approach to engage with broader society–through top-down policy engagement (Whitmer et al., 2010). Governments, from local municipalities to intergovernmental organizations, often have policy ambitions that would benefit from rigorous research aiding their implementation (Saner, 2007). However, university-based researchers, often the best equipped to contribute to these research demands, are often absent and policy institutes must rely on in-house analysis or consultants who lack the capacity for needed rigorous research (Howlett, 2009; Singh et al., 2014).

Besides the benefits that these new academic models will provide to policy, such research-policy hubs will help diversify the kinds of roles that students are exposed to, beyond traditional academic positions. The need for diversified student training in higher education has been recognized for some time, yet actual efforts to establish solutions to the recognized and growing problem have remained largely neglected (McDowell et al., 2014; Roach and Sauermann, 2017). With hubs dedicated to policy engagement, it will expose students and faculty to ongoing and emerging policy work, providing direct and indirect exposure to roles of decision-makers. This way academia can train students to be the next cohort of policymakers, diplomats, policy advisors, and analysts.

The proposal set out here will likely not eliminate issues of systemic bias and false meritocracy in academic recruitment and promotion. Achieving true fairness and equity is unprecedented and an ongoing concern across all aspects of society. There is much written about addressing systematic inequities in hiring, recognition, and leadership in academia, of which many proposals are debated and whose effects are being studied (Fradella, 2018; Singh, 2018; Malisch et al., 2020; Davies et al., 2021; Liboiron, 2021). These efforts should be continued, with continued assessment into their effectiveness and impacts. The proposal set out here would likely contribute to these efforts by breaking the circularity of peer-assessment and modeling "excellence" based on past researchers that supports the demographic insularity of academia. In anchoring academic work and evaluation toward societal impacts rather than professional opinions, the proposal here would also encourage more diverse kinds of research and ideas, and research that explicitly links with external communities, which are of greater interest to diverse demographic communities in academia (James et al., 2012; Hoppe et al., 2019). By diversifying the kinds of subjective interests that academia caters to (rather than pretending to eliminate subjectivity and deluding itself with "objective" measures), this proposal should help break the demographic stasis in academic leadership, the narrow interests academia explores, and the circular validation of academic work.

While the current system presented here looks bleak, there are important considerations that can help academia successfully transition to benefit sustainable development. First, the issues presented in this paper were all identified through academic work. Academic systems are not oblivious to the issues that limit its own relevance to society, legitimacy in claims of merit and excellence, and credibility as knowledge-broker; rather, academic systems are currently challenged in reflecting practice based on the knowledge it generates about itself. However, even in this regard there are points of optimism: for example, the Health Research Council of New Zealand has instituted a lottery to allocate research funding and early reports show overall acceptability of this system by academics applying for funding (Liu et al., 2020), and lotto-based allocation schemes have been pitched elsewhere in part to diversify the grantee pool (Fang and Casadevall, 2016). Potentially better still are funding schemes that give community partners in research projects equal or dominant roles in research funding, priorities and outputs, such as the Cooperative Research Centers in Australia (Shrivastava et al., 2020). There are also global initiatives trying to center academic work toward societal outcomes and the SDGs. For example, the United Nations Decade of Ocean Science for Sustainable Development is explicitly set up for science to serve sustainable development outcomes (according to the SDGs), though there is debate within academic circles about how science can best benefit sustainable development, and some academics are proposing science programs unlikely to address sustainable development goals but rather reinforce circular prestige systems and focus on "fundamental" research (Singh et al., 2021).

CONCLUSIONS

If Aldous Huxley's writings of the dangers of excluding academics from larger society were a warning, academia took the wrong message. Through creating internally-accountable processes and metrics, academia has isolated itself from broader society and has failed to link its own circular concepts of excellence with societal goals. Yet, because academia presents so much potential to contribute to societal challenges through the primary training it provides–evaluating and interrogating information and arguments–changes are needed for academia to assert its relevance beyond the narrow segment of society that make up its own ranks. Doing so will likely face severe obstacles within academia itself, as criticizing the processes and measures of merit academia relies on also calls into question whether the people who have benefited from these systems deserved to. More fundamentally, these criticisms call into question whether we ever can determine who deserves prestige in a fair and objective way. However, for academia to have a future that is considered credible and relevant to society, and to provide a productive outlet for people graduating academic institutions, academia must proactively leave Iceland and rejoin the rest of the world.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/**Supplementary Materials**, further inquiries can be directed to the corresponding author.

AUTHOR CONTRIBUTIONS

GS conceived the paper, conducted all analysis, and wrote the paper.

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SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/frsc.2022.832506/full#supplementary-material

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