Today’s hypercompetitive environment makes it easy to forget that academia wasn’t always organized around measuring and rewarding merit. In fact, the simple idea that merit could be assessed from publications, and that scholarship should be published at all, was, as Wellmon and Piper have recently described, a 19th century invention that ultimately transformed the academy and accelerated discovery across fields [1]. Despite the modern obsession with counts, rankings, and metrics, today’s system is clearly better than the old system of patronage and lineage alone.

Although the mechanics of scholarship have changed dramatically, Wellmon and Piper show that the pre-meritocratic winners adapted and their dominance remains intact. The inescapable question is whether this epistemic inequality limits the academy’s potential to create and share different kinds of knowledge. Wellmon and Piper answer by arguing that the university is a technology, and call for us to develop new practices that disrupt prestige hierarchies and quantify our way toward a more inclusive and productive meritocracy.

They are right to do so, but a better guiding analogy is biology, not technology. The university has evolved and diversified over the past century, adapting to new fields by remodeling its practices, traditions, and norms. While all these variations descend from Humboldt’s idea of a quantified meritocracy, the contrast between fields can be instructive. Take something as simple as double-blind peer review, which Wellmon and Piper say “underlies most academic publications.” On the contrary, this ‘genotype’ is rare across scientific journals, but common in the social sciences and humanities. The academic genome is diverse and diversifying [2]. Digital technology will likely shake entire fields from their comfortable niches.

But diversity is only a strength if academics are bold enough to conduct experiments and propagate successful genes across disciplines—not all selection needs to be natural. For instance, the journal eLife combines an open-discussion review process with open access and open finances, and it eschews impact factors [3]. Biologists adapted the physicists’ practice of uploading preprints to the open access arXiv by establishing their own bioRxiv website [4]. Nature journals recently imported an option for double-blind peer review [5]. And, computer science has both investigated the consistency of its peer review practices [6] and tested the anonymity of double-blind reviewing [7].

Using experiments to improve the academy requires that we further embrace measures and counts. In that sense, Wellmon and Piper have provided a valuable progress report on the meritocracy, and it isn’t entirely encouraging. Building a more inclusive and productive epistemic system remains a worthy goal, and the best path forward remains more experimentation, not less [8].

[2] The list of mutations goes on: economics reviews can take over a year, while biologists review papers in weeks; computer science publications are full-length peer-reviewed conference proceedings, not journal articles; presentations at English conferences consist of reading papers verbatim; the Nature Publishing Group has a journal dedicated to publishing datasets; physicists have been uploading preprints of their manuscripts to open-access repositories since before the World Wide Web existed; in one building on campus, interrupting a speaker mid-presentation is unthinkably rude, but next door, it is expected.

---

* daniel.larremore@colorado.edu
† allison.morgan@colorado.edu
‡ aaron.clauset@colorado.edu