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Commentary
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Universities in Ruins or on the Cusp of Renewal? Dark Academia, Global Data, Liberal Arts, and the Coming AI Shock

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When I first arrived in the United States more than four decades ago, the university still felt like a promise. The Ivy League campuses where I trained and later taught were imperfect places, but they carried a certain moral confidence. Tenure was something one could realistically aspire to. Tuition was a concern, but it did not yet feel like a lifelong mortgage. Departments argued over curriculum and hiring, not over which programs should be closed to balance next year's budget. Medicine, science, and the humanities lived in uneasy but genuine conversation.

Over the years, I watched that world morph into something more brittle and anxious. I saw colleagues move from one short-term contract to another; I signed letters for students whose debt loads were larger than the mortgages on their parents' homes; I sat in meetings where "brand," "market share," and "performance indicators" eclipsed older language about vocation, citizenship, or the public good. More recently, I have listened to a colleague who is building AI-powered teaching avatars calmly predict that "within a few years, institutions will no longer need most faculty for routine teaching."

These experiences were the backdrop against which I recently read three books in quick succession: *Peter Fleming's Dark Academia*: *How Universities Die (2021), Bill Readings' The University in Ruins (1996),* and *Sabine Hossenfelder's Lost in Math: How Beauty Leads Physics Astray (2018)*. Together, they gave conceptual shape to the unease many of us have felt for years. They also convinced me that what we are living through is not just a series of isolated "crises" but a deep redefinition of what a university is for.

What follows is my attempt, grounded in personal experience but leaning on these and other works, to make sense of where universities now stand, what is at stake for the liberal arts, humanities, and academic medicine, and how the rise of generative AI could either accelerate the decay or force a much-needed reimagining.

From "Culture" to "Excellence" to "Metrics":

Readings traced the modern research university to its historic alliance with the nation-state, charged with cultivating and safeguarding national culture. In his account, that project has largely collapsed under globalization: universities no longer speak the language of "culture" but of "excellence," an empty term that demands measurement and comparison yet says little about what should be excellent, or for whom (Readings, 1996).

Fleming picks up the story several decades later. He describes the "neoliberal university" as a metrics-obsessed, highly managerial and commercialized organization in which performance indicators, audits, branding campaigns, and debt-financed expansion colonize everyday life (Fleming, 2021).

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In this world, students are treated as consumers, academic labor is casualized, and mental distress is widespread.

Readings thus map the symbolic shift from culture to excellence. Fleming details the material consequences of debt, precarity, and alienation. Both raise an empirical question: what do current data show?

The Numbers Behind the Anxiety:

Several quantitative trends lend weight to the "dark academia" diagnosis, especially in North America and parts of Europe:

- *Precarious Academic Labor*. In the United States, roughly two-thirds of faculty today hold contingent (non-tenure-track or part-time) appointments, a sharp rise compared with the late 20th century (AAUP, 2023; NEA, 2023). This restructuring undermines academic freedom, continuity in teaching and mentoring, and long-term research programs.
- *Escalating Student Debt.* US student loan balances now total approximately $ 1.6–$ 1.7 trillion, with tens of millions of borrowers and substantial growth over the past decade (U.S. Congressional Research Service, 2025; Pew Research Center, 2024). Similar high-fee systems elsewhere report rising debts and concerns about intergenerational equity.
- *Rapid but Unequal Massification.* UNESCO estimates that global higher-education enrollment has more than doubled since 2000, reaching over 250 million students and an international gross enrollment ratio of more than 40% (UNESCO, 2025). Yet participation remains below 10% in parts of Sub-Saharan Africa, highlighting deep structural inequities.
- *High Attainment, Uneven Payoff*. Across the Organization for Economic Co-operation & Development (OECD) countries, the share of 25- to 34-year-olds with tertiary education has risen to nearly half of the population; however, over-qualification and stagnant skills in some systems are fueling doubts about the labor-market value of degrees (OECD, 2024, 2025).

The picture is of a sector simultaneously expanding and hollowing out: more students, more degrees, but uneven quality, mounting debt, and increasingly precarious staff.

A Field-Level Warning Sign: Sabine Hossenfelder and Fundamental Physics:

These structural concerns are mirrored in the internal dynamics of particular disciplines. Sabine Hossenfelder's work on the "crisis" in fundamental physics offers a striking case study of how misaligned incentives within the contemporary university can distort both research agendas and scientific judgment.

In *Lost in Math: How Beauty Leads Physics Astray, Hossenfelder (2018)* argues that high-energy and quantum-gravity theorists have become captivated by aesthetic ideals "beauty," "naturalness," and symmetry as informal selection criteria for theories. Elegant but empirically inaccessible models proliferate, while hard questions about testability and falsification are sidelined. She explicitly links this to academic incentives: hiring, promotion, and funding systems reward fashionable, mathematically sophisticated work that is difficult to disprove, and young researchers quickly learn to align their ambitions with what is likely to be published and cited rather than with what is most likely to be true.

Her public reflections on leaving formal academia function as a kind of ethnography of "dark academia" from the inside: a world of short-term contracts, hyper-competition, and subtle conformity pressures, in which it is easier to extend an established paradigm than to question its foundations. What "The University in Ruins" and "Dark Academia" describe at the institutional level, Hossenfelder documents at the disciplinary level: how a prestige-and-metrics ecosystem can drift away from empirical responsibility while remaining formally productive.

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Hossenfelder has also noted, cautiously, that AI might one day be used to counteract some of these human biases in theory choice and funding decisions, even as she warns against overhyping current large language models and their reasoning abilities. This tension between AI as a potential corrector of human bias and AI as a new source of opacity and error foreshadows the next phase of the university's crisis.

What Happens to the Liberal Arts and Humanities?

In Reading's narrative, the liberal arts and humanities are central: they were once the privileged vehicle through which the university articulated "culture." As the nation-state project erodes, that role becomes precarious. Fleming's account of neoliberal academia shows how quickly the humanities can be recast as cost centers rather than core missions.

Several tendencies are visible across many systems:

- *Shift to Vocational and STEM programs*. Governments and families increasingly prioritize programs that promise immediate employability in business, engineering, computing, and health sciences, often at the expense of philosophy, history, languages, and the arts (Nussbaum, 2010; Bok, 2017).
- *Program Closures and Consolidation*. Budget-driven reviews often target low-enrollment departments in the humanities and small liberal arts colleges, leading to mergers, closures, or a heavy reliance on adjunct labor.
- *Instrumental Rhetoric*. Where the liberal arts are defended, it is often on narrowly instrumental grounds (e.g., "critical thinking" for the job market) rather than as domains that cultivate judgment, historical memory, moral imagination, and the capacity to live with pluralism, precisely the capacities Readings associates with a "community of dissensus."

From my own vantage point in academic medicine, I have seen both sides: humanities departments under constant pressure, and at the same time, clinicians rediscovering narrative medicine, ethics, and medical humanities as essential correctives to purely technical training. For medicine, engineering, and the sciences, the liberal arts are increasingly constitutive rather than merely complementary. They contribute directly to clinical reasoning, communication, professionalism, and the ability to interrogate the social determinants of health. They are also the domains best positioned to ask uncomfortable questions about who benefits and who is harmed when universities align themselves with corporate or state power.

Academic Medicine at the Fault Line:

Medical and health-science universities sit at a unique intersection of these pressures.

- *Commercial and Clinical Entanglements*. Academic health centers navigate complex partnerships with the industry, intellectual property regimes, and hospital revenue cycles. This can intensify the "excellence treadmill" as publication counts, grant income, and commercialization metrics overshadow long-term investments in teaching, community health, or neglected diseases.
- *Workforce and Training Pipelines*. A heavy reliance on short-term research contracts and grant-dependent salaries mirrors the broader casualization of the academy, with direct consequences for patient care, supervision, and specialty shortages.
- *Global Inequities*. While high-income countries consolidate biomedical research capacity, many low- and middle-income countries struggle to fund even basic academic infrastructure despite rapidly growing student populations and disproportionate burdens of disease.

Re-centering the liberal arts within health-science education through integrated humanities curricula, narrative medicine, ethics, and social-science

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perspectives offers one way to resist a purely technocratic model of academic medicine. It reminds clinicians-in-training that patients are not data points, and that health is inseparable from history, culture, and politics.

A New Disruption: AI and the Unbundling of Teaching:

Neither Readings nor Fleming wrote with generative AI in view, yet their diagnoses make it easier to see why AI feels so existential for many educators. If universities are already struggling with metrics, casualization, and consumerist pressures, AI may act as an accelerant.

A recent conversation brought this home to me with unusual clarity. A colleague who is at the forefront of building AI-driven teaching avatars, photorealistic, emotionally responsive digital instructors powered by large language models, remarked, without hesitation, that "within a few years, institutions will no longer need most faculty for routine teaching." In his vision, a small cadre of experts would design curricula and oversee quality. At the same time, AI avatars deliver personalized lectures tailored to students' learning habits, run simulations, and conduct formative assessments at scale. Human educators, he suggested, would be reserved for high-stakes tasks and elite programs.

Whether one agrees with this prognosis or not, it captures the mood in parts of the ed-tech world: teaching is increasingly seen as a process that can be modularized, standardized, and then automated.

Against that backdrop, several broader trends are emerging:

- *Automation of Routine Teaching*. Generative AI tools increasingly produce lecture outlines, slide decks, quiz banks, and even video lectures. As these tools mature, institutions, especially those under financial pressure, may be tempted to automate a significant portion of content delivery and assessment, particularly in large introductory courses. This threatens to further devalue human teaching, particularly for contingent staff whose roles are easiest to "replace."
- *Erosion of Assessment Integrity*. AI systems can generate plausible essays, code, and problem-set answers, challenging traditional take-home and even some in-class assessments. Early studies suggest that students' use of AI for coursework is widespread, often outpacing institutional policy and detection capabilities.
- *New Forms of Dependency and Deskilling*. Faculty surveys reveal mixed attitudes: many see time-saving benefits in using AI to prepare materials or provide feedback, but worry about over-reliance, erosion of critical thinking, and difficulty in modeling expert judgment for students. If AI becomes the *de facto* author of syllabi, exam questions, and even recommendation letters, early-career academics may have fewer opportunities to develop deep pedagogical craft.
- *Policy Vacuums and Governance Challenges*. International bodies such as UNESCO and the OECD now urge a "human-centered" approach to AI in education, insisting that teachers remain in the loop, that AI literacy be developed, and that clear institutional policies be adopted. Implementation, however, lags behind these aspirations.

For the liberal arts, the AI moment is both threat and opportunity. It threatens to automate precisely those textual and argumentative tasks that once defined humanities education, inviting students to outsource reading and writing. However, it also creates powerful new objects of study and critique, raising questions about language, representation, bias, personhood, labor, and democracy that humanities scholars are uniquely equipped to address. In this sense, Hossenfelder's warnings about "beautiful" but empirically empty theories in physics resonate strongly: they remind us that sophisticated formal systems, whether in theoretical physics or AI, must remain answerable to reality, evidence, and human judgment.

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Dwelling in the Ruins: Elements of a Translational Agenda:

Readings famously proposed that we "dwell in the ruins" of the old nation-state university rather than nostalgically trying to restore it (Readings, 1996). Fleming, despite his bleak tone, likewise calls for resistance to what he sees as the terminal tendencies of neoliberal academia (Fleming, 2021). From my vantage point in academic medicine, this can translate into several practical commitments:

- *Re-anchoring Purpose.* If "excellence" is an empty signifier, institutions must be explicit about substantive ends: improving population health, reducing inequities, advancing trustworthy science, nurturing critical citizens, and sustaining cultural memory. Strategies, promotion criteria, and funding decisions should be judged against these ends, not only against bibliometrics or revenue.
- *Re-cantering the Liberal Arts*. Rather than treating the humanities and the arts as dispensable, universities can recognize them as essential for ethical reasoning, historical perspective, civic imagination, and the capacity to live with disagreement. In medical and STEM programs, this implies deliberately integrating humanities-based inquiries, such as narrative medicine, ethics, the history and philosophy of science, and medical anthropology, into core curricula.
- *Valuing Diverse Academic Labor*. Rebalancing away from pervasive contingency is essential to sustain high-quality teaching, mentoring, and long-term translational research. Recognition and reward structures need to honor pedagogical innovation, curriculum design, team science, and community engagement areas that often sit outside narrow "excellence" metrics.
- *Protecting Spaces of Dissensus*. The university as a "community of dissensus" requires institutional protection for debate about politics, ethics, religion, technology, and the university itself. For health-science institutions, this means protected time and forums where faculty and students can question not only experimental data, but also commercial incentives, AI-driven decision support, and other sociotechnical imaginaries.
- *Designing Human-centered AI Ecosystems*. Instead of allowing AI to displace teaching labor silently, universities can treat AI as a catalyst to redesign curricula around higher-order skills, including the critical appraisal of machine outputs, ethical reasoning, human communication, narrative understanding, and hands-on clinical or laboratory practice. AI becomes a partner and object of critique, not a hidden replacement for human educators.
- *Re-imagining Metrics*. Metrics will not vanish, but they can be re-engineered. For translational work, this may involve tracking time from discovery to implementation, ensuring equity in trial participation, identifying reproducibility indicators, and assessing community-level health outcomes, while consciously limiting the dominance of journal impact factors or raw publication counts.

Conclusion:

If Dark Academia *and* The University in Ruins offer diagnoses of the late-20th- and early-21st-century university, the marginalization of the liberal arts, the crisis in fields such as fundamental physics, and the rapid advance of generative AI are the new stress tests of whether those diagnoses are being taken seriously. Readings' image of a university organized around the empty signifier of "excellence," and Dark Academia's fetish for decaying campuses and exhausted scholars, cease to be merely aesthetic or theoretical gestures once they are read against adjunctification, rankings-driven management, and the quiet dismantling of non-vocational disciplines. The sector is undeniably under strain: precarious labor, massified enrolments, uneven graduate outcomes, shrinking humanities budgets, disciplinary drift, and now a wave of automation that can replicate many surface features of teaching and scholarship. In this environment, it is no longer clear that the university can credibly claim to be a space

for disinterested inquiry, slow thinking, or the cultivation of judgment, rather than merely delivering credentials and content.

Yet the ruins are not empty. For all their flaws, universities remain among the few institutions with the mandate and infrastructure to link rigorous knowledge production, liberal education, and public service on a large scale. Laboratories, archives, libraries, ethics boards, student services, and collegial governance structures are imperfect and often compromised. Still, they are also real, material conditions that distinguish universities from platforms, think tanks, or training boot camps. Even in their most bureaucratized forms, courses still bring students and teachers into structured dialogue; research groups still convene around shared problems rather than purely market-driven demands; academic freedom, however fragile, still offers a normative foothold from which to resist direct capture by state or corporate agendas.

Whether universities emerge from this period as hollow credential factories or as reimagined, human-centered communities of inquiry will depend less on the inevitabilities of "technology" or "the market" and more on the governance choices, labor struggles, disciplinary self-corrections, and ethical commitments made in the years ahead. Governance choices include how boards and senates respond to budget crises: Do they treat the humanities and basic sciences as expendable cost centers, or as core functions to be protected and renewed? Labor struggles will determine whether the academic workforce is stabilized through secure contracts, livable wages, and meaningful participation in decision-making, or further fragmented into a just-in-time teaching precariat that can be partially replaced by AI-mediated content delivery. Disciplinary communities will have to decide whether to close ranks defensively or rethink their curriculum, methods, and public engagement in light of new tools and emerging forms of inequality. Ethical commitments about what constitutes good teaching, responsible research, fair assessment, and genuine inclusion will shape how, and for whom, generative AI is deployed.

In other words, the future of the university is not a simple function of technological disruption or demographic "headwinds." It is a contested, political project. The same generative systems that threaten to devalue academic work into infinitely replicable text can, if properly governed, be utilized to expand access, support multilingual learners, and free up time for higher-order forms of mentoring and inquiry. The same financial pressures that are now used to justify closing language or philosophy departments could prompt new cross-disciplinary alliances and more publicly accountable models of funding. The ruins that Dark Academia aestheticizes and that Readings theorizes are real. Still, they are also a starting point: a reminder that institutions are made and remade by concrete decisions, not by fate. *Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing." (Arundhati Roy)*

KEYWORDS: *Higher Education; Universities; Liberal Arts; Humanities; Academic Medicine; Artificial Intelligenc*

Use of Generative Artificial Intelligence: Generative artificial intelligence (Claude, Anthropic) was used solely to assist with language refinement and copy-editing; all ideas, arguments, and conclusions are those of the author, who takes full responsibility for the content.

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