

"A man is
great by
deeds, not by
birth"
-Chanakya

Welcome to IIMK



INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE



Working Paper

IIMK/WPS/665/SM/2026/03

January 2026

**AUDIT CULTURE AND ACADEMIC CAPITALISM: DEATH OF CRITICAL
THINKING AMONG DOCTORAL SCHOLARS?**

ANUBHA SHEKHAR SINHA ¹

© All rights belong to their respective author.

Please contact the corresponding author, if you would like to access the full paper.

¹Associate Professor, Strategic Management Area, Indian Institute of Management Kozhikode, IIMK Campus P.O, Kunnamangalam, Kozhikode, Kerala 673 570, India; Email - anubhashekhar@iimk.ac.in, Phone Number - 0495 2809111

**AUDIT CULTURE AND ACADEMIC CAPITALISM: DEATH OF CRITICAL
THINKING AMONG DOCTORAL SCHOLARS?**

BY

ANUBHA SHEKHAR SINHA

Abstract:

In this paper, we suggest that academic capitalism has replaced the traditional view of education as a public good, by making education commensurate with market logic. Driven by market logic, universities, both public and private, strive for growth and compete against each other at global and local levels. Further, audit culture has proliferated in academia, wherein, there is a profound shift as knowledge and practices are increasingly being evaluated not by intrinsic scholarly criteria but by external measures of productivity, efficiency and impact. Together, academic capitalism and audit culture create a unilateral focus on quantitative records of publications, patents, grants and so on, such that one university could outdo the other following market logic, on these parameters. Under such competitive pressures, universities and faculty have little space or bandwidth to support development of the disposition of open-mindedness, inquisitiveness, truth-seeking, confidence in reasoning among doctoral scholars, which is a key to development of their critical thinking abilities. In this paper, we also suggest how these problems could be addressed to ensure that better learning environment is created for doctoral scholarship in universities.

Introduction

A well-known Zen story recounts how a learned professor once visited the Zen master, eager to understand Zen. The master received him courteously and, as was custom, served tea. He filled the professor's cup. To the professor's surprise, the Zen master continued pouring until the liquid spilled over onto the table. The professor, unsettled, protested, "Stop! The cup is already full — no more can go in!" The Zen master calmly responded, "Like this cup, your mind is full of opinions, assumptions, and conclusions. Unless you first empty your cup, how can you learn anything new?" This parable, rooted in Zen philosophy, resonates profoundly with the cultivation of critical thinking. The overflowing cup symbolizes the clutter of preconceived notions that scholars often bring in to inquiry. Just as the professor had to recognize the futility of pouring more into a brimming vessel, doctoral students must learn to question and set aside inherited conditioning, internalized assumptions, disciplinary dogmas, and unexamined certainties, while observing or examining something. From a pedagogical standpoint, the role of a faculty mentor mirrors that of the Zen master — not to provide definitive answers but to design situations that provoke awareness of intellectual limits.

In the last few years, focus on research paper publications over other modes of presenting research contributions have become almost ubiquitous in universities across globe, including in Indian Universities – though at some point, only a few years ago, it was a dominant mode of showcasing academic accomplishments in North American universities. This shift can be a stratification resulting from forces like – a. Globalization of higher education accreditations and rankings, which rely heavily on bibliometric indicators, b. Research evaluation and accountability regimes, which proliferated from "publish or perish cultures" of North American universities to UK's research excellence frameworks (REF), Australia's excellence in research for Australia (ERA) and India's academic performance indicator (API) score system, which has made for a bureaucratic requirement of publications in advancement of one's academic

career, c. Expansion of universities, which has made universities go global and compete against each other and with local universities in different countries and d. Digitization and Global Indexing, which has made indexing of papers in Web of Science, Scopus and Google Scholar with digital object identifier (DOI) as a normative requirement for academic existence.

These global forces, have led to shift in normative expectation in knowledge production systems. As a result of this shift, doctoral scholars face the repercussions of changed academic environments early on in their careers – the result is depletion and eventual death of critical thinking abilities in them. This working paper tries to capture the changes in the academic world and how it has led to creation of new academicians, who are experiencing dearth of opportunities to enhance critical thinking capabilities. This paper also discusses a way forward for course correction.

Emergence of Audit Culture and Academic Capitalism

Audit Culture: Strathern (2000) posited that audit, which was once limited to financial and legal domains, has pervaded to most human spaces, including academia. This proliferation of auditing practices into everyday life, professional work and academic practices tends to create a culture that can be termed as audit culture. This culture embodies the worldview that activities should be monitored, measured and made accountable through standardized metrics, indicators or procedures. This worldview reshapes how institutions define value - in academic settings, there is a profound shift as knowledge and practices are increasingly being evaluated not by intrinsic scholarly criteria but by external measures of productivity, efficiency and impact.

Today, audit culture has become a regime of accountability, performance measurement, and evaluation practices that increasingly shape academic institutions. Quantitative measurements of qualitative human inputs and outputs have started dominating the space of academia –

eventually obscuring exactly how those quantitative figures were arrived at by academicians and their institutions – eventually, everything boils down to a few numbers that are set and are to be chased! Universities, today face constant audits, rankings, and competition for grants. This pushes academic work to focus on measurable indicators like publication counts, impact factors, and h-indices.

Audit culture manifests in academia through changed expectations. Earlier, teaching excellence was often highly regarded as a factor that showcased a faculty's academic reputation; it was judged qualitatively with holistic understanding from the recipients of that knowledge. Further, focus on writing books, monographs and life-long works that showcased academicians embeddedness in deep inquiries were also considered to be a hallmark of academic excellence. Among teaching excellence requirements, teaching the doctoral scholars was understood as the highest scholastic performance and the doctoral students were considered as the most important recipients. Doctoral students were understood to carry the genes of academic inquiry from their mentor faculty and move forward in their own academic journey. India held a special place for “Guru-shishya Parampara”, since ages, for example.

Academic Capitalism: It refers to the set of activities that follow market logic through which universities and faculty participate in market-oriented behaviours (Slaughter & Rhodes, 2004). The traditional views of academia understood universities as a public good institution, largely insulated from market logic. Slaughter and Rhodes (2004) suggests that universities of today are deeply embedded in capital and knowledge creation that serve market interests, where both publicly and privately funded institutions are reorganizing resources such that the public good characteristic of education is being replaced by market logic. Therefore, academic capitalism becomes the reason for universities to want to become big, go for global and local competition with universities and behave akin to corporations in matters of competition and growth.

Critical Thinking Capabilities and Doctoral Scholarship

Doctoral education requires students to question the fundamental assumptions behind perceived realities that surround them – they should be placed in a supportive stimulating environment that holds space for them as they get lost in the vagaries of beliefs, norms and expectations of their paradigmatic realities that surrounds them, to find themselves back again and each time. As they do so, they evaluate evidences and synthesize complex ideas into novel insights during this iterative process of rediscovering themselves – this iterative process of critical thinking builds researchers.

Critical thinking has long been recognized as a cornerstone of doctoral scholarship. In this context, critical thinking functions not merely as a cognitive skill but also as a disposition; it is built over time through practice integral to scholarly identity. Although there is no single, universally accepted definition of critical thinking, scholars converge on the view that critical thinking involves not only higher-order cognitive processes but also reflective dispositions. Facione (1990) conceptualizes critical thinking as comprising of cognitive skills (interpretation, analysis, evaluation, inference, explanation and self-regulation) and affective dispositions (open-mindedness, inquisitiveness, truth-seeking, confidence in reasoning). The dispositions need to be built in the character of doctoral students; and it is straight-jacketed. It requires holding space for these students until they return with their empty cup to learn!

Clearly, therefore, there is a reason to worry for academia, as these doctoral students of today are those human agents, who are being currently shaped to carry over the scholarly tradition forward. In this working paper, we take a questioning approach to figure out what is current state of academia with respect to doctoral scholars and how could we envisage death of critical thinking capabilities in them if we do not correct the course of academia towards their socialization and pedagogy?

Effect of Emergence of Audit Culture and Academic Capitalism on Academia

As universities, both public and private, working in their own ways, chase to work akin to corporations – market logic has been replacing the public good logic that should underpin academic institutions. Guided by market logic, academic institutions want to grow and expand within their countries and into other countries. The urgency and scale of competition, resulting from proliferation of global universities and their competition within their own countries and with local universities, where they expand, leaves little room to work with messy indicators like qualitative metrics of teaching excellence or lifelong works of academicians and so on. The local and global competition under academic capitalism values quantitative metrics in sync with the requirements of audit culture prevalent in these universities! Therefore, the proliferation of audit culture is further exacerbated with academic capitalism. Clearly, these two – audit culture and academic capitalism – have made education a “commodity” and, therefore, there is little scope for holding space for development of critical thinking among doctoral scholars. Together, academic capitalism and audit culture ensure that there is little space available to these universities to care for development of academic spaces that develop critical thinking within doctoral scholars!

Effect on Doctoral Scholarship: Merton had espoused celebrated ideal values of science (1973). He suggested that these ideal values rested on some premises like a. sharing knowledge (communalism) with anyone who wanted to know or learn, b. judging ideas based on merit rather than on any other considerations (universalism), c. making personal gains subservient to the pursuit of truth (disinterestedness) and finally d. having a critical mindset to scrutinize every underlying assumptions behind any reality (organized scepticism). The ideal values of science (Merton, 1973) supports building of metacognition or the awareness and regulation of one’s thinking, including identifying biases and adjusting reasoning strategies (Flavell, 1979). Further, they create disposition of critical thinking, which includes creating habits of a mind

that can sustain critical engagement, such as scepticism, intellectual humility, and perseverance (Paul & Elder, 2014). Finally, they support the doctoral students' capacity to apply critical reasoning within disciplinary paradigms, acknowledging epistemological assumptions and power structures (Brookfield, 2012). These ideal values are endemic to any worthy academic pursuits – doctoral education being one of the most important one! Doctoral education should not be about having to satisfy the market logic of academic capitalism or to chase for numbers laid down by audit cultures.

Proliferation of audit culture and rationalization of academic capitalism, as ethically correct way of taking academia forward, has changed these ideal values of science (Merton, 1973). We have created time pressures and negative incentives for critical thinking, in general, for people in academia. Goodhart's law is an adage that has been stated as, "*when a measure becomes a target, it ceases to be a good measure*", thereby, implying that if one takes a metric that was originally designed to track performance (for example exam scores, publication counts, GDP growth) and starts using it as the main goal or target, then people would change their behaviours to optimize for that number. As a result, the metric stops reflecting the real thing that it was meant to measure. Campbell's Law goes a step further to suggest that, "*the more a quantitative social indicator is used for decision-making, the more it will be subject to corruption pressures, and the more it will distort the very processes it is intended to monitor.*" It implies that the more we use numbers like test scores, publication counts and so on to make high-stake decisions like funding, promotions, rankings and so on, the more professors and institutions would start to devise measures to game the system. Therefore, in academia, if professors are judged mainly by the number of publications, they may start splitting their work into tiny papers (salami-slicing) just to inflate counts or reducing real quality or start using questionable research practices. Similarly, while teaching doctoral students, such professors may "*teach to the test*" instead of engaging with doctoral scholars to provide supportive stimulating

environment to cultivate critical thinking, as this does not directly benefit their incentive structure.

How might Doctoral Students be affected by Audit Culture and Academic Capitalism?

Supervisory direction and institutional cultures in universities have been known to shape doctoral students – they create supportive stimulating environment that is important to the development of critical thinking abilities. Further, students' socialization in universities have been found to have significant effects on them, which could be both enabling and inhibiting (Pyhalto, Stubb, & Lonka, 2009, 2011). The psychological environment matters! Elevated levels of anxiety, depression and burnout have also been reported among doctoral scholars with respect to people from their comparable cohorts (Levecque et al, 2017; Evans et al, 2018).

Negative Incentives for Critical thinking: Tight publication timelines compress opportunities for engagement with seminal and classic works, exploratory reading, interdisciplinary wandering, and methodological inquiry. Time pressure and precarious prospects amplify incentives to conform. They reduce cognitive bandwidth for critical exploration. Time scarcity pushes students toward using tested methods, pre-cooked theories, and template-driven papers, undermining the cultivation of reflective judgment and argumentation. It explains why doctoral students pursue Kuhn's (1962) puzzle-solving research, where students know that pieces of the puzzle are there and they are just needed to put them together to get the puzzle completed – not to try to research on important and challenging topics.

Narrowing of Cognitive Scope: Chronic stress and precariousness correlate with reduced cognitive flexibility and risk tolerance (Levecque et al., 2017; Evans et al., 2018). Students adopt defensive strategies over intellectually ambitious, theory-challenging work.

Development of a Conformist: When career progression hinges on early publications in ranked journals, students adopt the implicit norms of those venues—topic selection, favoured methods, stylistic conventions—reducing willingness to challenge assumptions. They become conformists trying to avoid publishing messy, or boundary-challenging results (Lamont, 2009; Bourdieu, 1988).

Development of Methodological Opportunism: Such opportunism is antithetical to organized scepticism and self-critique—the heart of critical thinking (Ioannidis, 2005; Smaldino & McElreath, 2016).

In particular, these may discourage open critique (organized scepticism) and shift motivations away from truth-seeking toward personal advancement (disinterestedness) (Fanelli, 2012; Ioannidis, 2005).

What can be done to create Supportive Stimulating Environment for Doctoral Scholars by Universities and Professors?

Doctoral students need socialization in an institution that values critical thinking. Therefore, the institutional environments in universities need to change to be able to create a supportive stimulating environment for doctoral scholars. The incentives for professors should also be changed such that they are required to support development of critical thinking abilities in their students. Finally, pedagogy needs to change to ensure that doctoral students get the basic space and content needed to develop critical thinking abilities.

Change in University Institutions: As audit cultures and academic capitalism has pervaded universities across the globe, reformists have called out to counter them through reforms. One such way is to replace the current metrics followed in universities for recruitment, promotion, grants, and so on with more holistic measures of academic accomplishments of faculty. One such initiative is DORA, which is San Francisco Declaration on Research Assessment (2012).

DORA is an international initiative that critiques over-reliance on journal-based metrics (like impact factor) in hiring, promotion, and funding decisions. Instead, it calls for fairer, broader, and more meaningful evaluation of research and researchers. For example, a traditional metric would suggest that: “This researcher has 20 papers in Q1 journals with an h- index of 18. Therefore, she must be excellent”, while a DORA aligned metric would suggest that: “This researcher developed an open-source tool used worldwide, published rigorous work (regardless of journal prestige), mentored young scholars, and contributed to shaping public health policy. Therefore, she must be excellent.” DORA key features include among other indicators, the indicator for collaboration & mentorship, which rewards teamwork, interdisciplinary projects, supervision of students, and service to the academic community.

Pedagogy and Curriculum Design: Engagement with multiple perspectives—through interdisciplinary cohorts, international collaborations, or heterogeneous reading lists—broadens critical horizons (Brookfield, 2012). Interdisciplinary wanderings should be made endemic to courses and a platform should be created for the same in universities. Curriculum should mandate reading of seminal works and classic books. Further, avenues for problem-based learning need to be created. Also, holistic research methodology courses that give due space to all methodologies should be created. Philosophy and epistemology based courses that expose students to debates about knowledge production, and fosters reflexivity about assumptions underlying paradigm should be created. A culture, where questioning is encouraged, dissent is valued, and intellectual risk-taking is supported without fear of retribution needs to be created (Brookfield, 2012). Pedagogy for enhancing critical thinking emphasizes active learning and dialogic engagement. For example, Socratic dialogue should be used by mentoring faculty that probes assumptions, clarifies concepts, and challenges reasoning (Paul & Elder, 2014). Faculty, who demonstrate how they interrogate assumptions, weigh evidence, and revise positions offer students a living example of critical thinking

practice (Bailin et al., 1999). Similarly, reflective writing that encourages students to journal their research memos, reflections and critical essays should be encouraged as they develop metacognitive awareness and reflexivity (Moon, 2013). Also, structured peer feedback cultivates evaluative skills and builds capacity to handle critique; avenues for such interactions needs to be created (Brookfield, 2012). Allowing doctoral scholars to pursue questions of personal relevance enhances intrinsic motivation for critical engagement should be encouraged (Deci & Ryan, 2000). Supervisory relationships that emphasize dialogue, rather than directive instruction, cultivate independence and reflexivity should be encouraged (Lee, 2008). Such steps would hold a space for development of critical thinking abilities among doctoral students.

References

- Alvesson, M., Gabriel, Y., & Paulsen, R. (2017). *Return to meaning: A social science with something to say*. Oxford University Press.
- Alvesson, M., & Sandberg, J. (2011). Generating research questions through problematization. *Academy of management review*, 36(2), 247-271.
- Biagioli, M., & Lippman, A. (Eds.). (2020). *Gaming the metrics: Misconduct and manipulation in academic research*. Mit Press.
- Bourdieu, P. (1988). *Homo academicus*. Stanford University Press.
- Brookfield, S. (2013). Teaching for critical thinking. *International Journal of Adult Vocational Education and Technology (IJAVET)*, 4(1), 1-15.
- Campbell, D. T. (1979). Assessing the impact of planned social change. *Evaluation and program planning*, 2(1), 67-90.
- Declaration, D. O. R. A. (2012). The San Francisco declaration on research assessment. *Putting science into the assessment of research*.

Edwards, M. A., & Roy, S. (2017). Academic research in the 21st century: Maintaining scientific integrity in a climate of perverse incentives and hypercompetition. *Environmental engineering science*, 34(1), 51-61.

Ennis, R. H. (1987). Critical thinking and the curriculum. *Thinking skills instruction: Concepts and techniques*, 40-48.

Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature biotechnology*, 36(3), 282-284.

Facione, P. A. (1990). The California Critical Thinking Skills Test--College Level. Technical Report# 1. Experimental Validation and Content Validity.

Fanelli, D. (2012). Negative results are disappearing from most disciplines and countries. *Scientometrics*, 90(3), 891-904.

Firestein, S. (2012). *Ignorance: How it drives science*. Oxford University Press.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American psychologist*, 34(10), 906.

Gibbons, M. (1994). The new production of knowledge: The dynamics of science and research in contemporary societies. *Thousand Oaks, California*.

Goodhart, C. A. (1984). Problems of monetary management: the UK experience. In *Monetary theory and practice: The UK experience* (pp. 91-121). London: Macmillan Education UK.

Ioannidis, J. P. (2005). Why most published research findings are false. *PLoS medicine*, 2(8), e124.

Kuhn, T. S. (1970). *The Structure of Scientific Revolutions, 2nd enl. ed.* University of Chicago Press.

Lamont, M. (2009). *How professors think: Inside the curious world of academic judgment*. Harvard University Press.

Levecque, K., Anseel, F., De Beuckelaer, A., Van der Heyden, J., & Gisle, L. (2017). Work organization and mental health problems in PhD students. *Research policy*, 46(4), 868-879.

Merton, R. K. (1973). *The sociology of science: Theoretical and empirical investigations*. University of Chicago press.

Mountz, A., Bonds, A., Mansfield, B., Loyd, J., Hyndman, J., Walton-Roberts, M., ... & Curran, W. (2015). For slow scholarship: A feminist politics of resistance through collective action in the neoliberal university. *ACME: An International Journal for Critical Geographies*, 14(4), 1235-1259.

Muller, J. (2018). *The tyranny of metrics*. Princeton University Press.

Munafò, M. R., Nosek, B. A., Bishop, D. V., Button, K. S., Chambers, C. D., Percie du Sert, N., ... & Ioannidis, J. P. (2017). A manifesto for reproducible science. *Nature human behaviour*, 1(1), 0021.

Nosek, B. A., Spies, J. R., & Motyl, M. (2012). Scientific utopia: II. Restructuring incentives and practices to promote truth over publishability. *Perspectives on Psychological Science*, 7(6), 615-631.

Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science*, 349(6251), aac4716.

Paul, R., & Elder, L. (1990). *Critical thinking*. Rohnert Park, CA: Sonoma State University.

Pyhältö, K., Stubb, J., & Lonka, K. (2009). Developing scholarly communities as learning environments for doctoral students. *International Journal for Academic Development*, 14(3), 221-232.

Slaughter, S., & Rhoades, G. (2004). *Academic capitalism and the new economy: Markets, state, and higher education*. Jhu press.

Smaldino, P. E., & McElreath, R. (2016). The natural selection of bad science. *Royal Society Open Science*, 3*, 160384

Strathern, M. (2000). Accountability... and ethnography. *Audit cultures: anthropological studies in accountability, ethics and the academy*, 278-304.

Strathern, M. (Ed.) (2000). *Audit cultures* (Vol. 146). London: Routledge.

Wilsdon, J., Allen, L., Belfiore, E., Campbell, P., Curry, S., Hill, S., ... & Johnson, B. (2015). *The metric tide. Report of the independent review of the role of metrics in research assessment and management*.

DO NOT COPY



भारतीय प्रबंध संस्थान कोषिककोड
Indian Institute Management Kozhikode
Globalizing Indian Thought

Research Office
Indian Institute of Management Kozhikode
IIMK Campus P. O.,
Kozhikode, Kerala, India,
PIN - 673 570
Phone: +91-495-2809237/ 238
Email: research@iimk.ac.in
Web: <https://iimk.ac.in/publications>

