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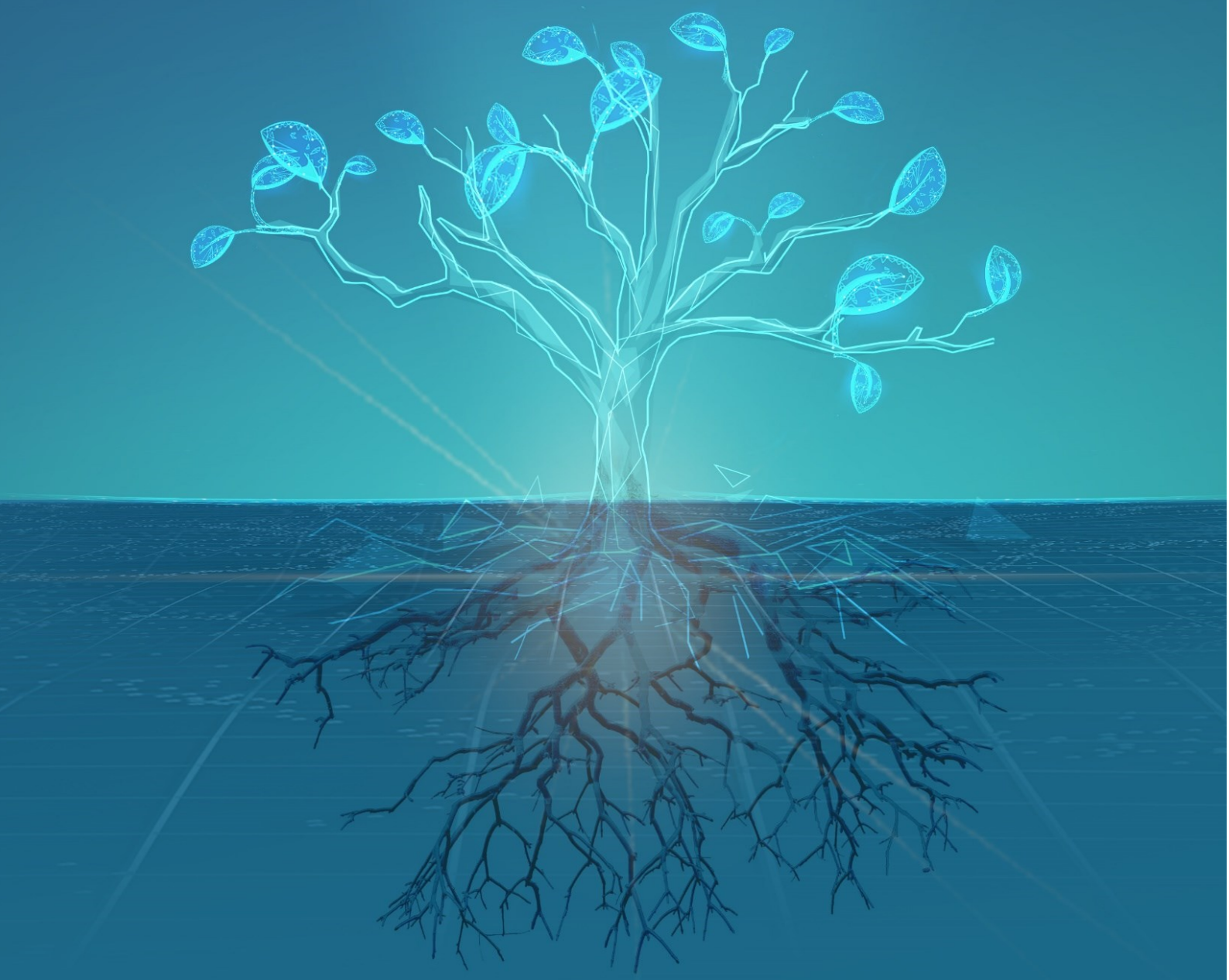

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Institut International de Recherche et d'Action sur la Fraude et le Plagiat Académiques (IRAFPA)

International Institute of Research and Action on Fraud and Plagiarism in Academia (IRAFPA)

Website: https://irafpa.org

Postal Address:

IRAFPA c/o Tal Schibler, DGE Avocats

Rue Bartholoni 6

1204 Geneva

Switzerland

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From Sociopathy to the Academic Fraud Pandemic: New Insights upon the Human Factor

Pedro URBANO; ORCID: 0000-0002-7547-3035[1]

Professor, University of Coimbra, CEIS20, FPCEUC; CIEM

Marie-Frédérique BACQUÉ; ORCID: 0000-0001-6223-4409

Professor, University of Strasbourg, SuLiSoM; CIEM

Abstract

This reflection revisits an earlier text on the relationship between new generations of researchers and academic fraud, developing it in a broader direction but at the same level of analysis: the human factor, as defined by the psychological and sociological contexts of academic fraud, is the first and most important explanation (but not the only one) for dishonest behaviour in science and academia.

Keywords

Academic fraud, plagiarism, unethical behavior, Gen Z, human factor, Generative AI.

Résumé

Cette réflexion reprend un texte antérieur sur la relation entre les nouvelles générations de chercheurs et la fraude académique, en le développant dans une direction plus large, mais au même niveau d'analyse : le facteur humain, tel que défini par les contextes psychologiques et sociologiques de la fraude académique, est la première et la plus importante explication (mais pas la seule) qui rend compte des comportements malhonnêtes dans la science et le monde universitaire.

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Mots-clés

Fraude académique, plagiat, comportement contraire à l'éthique, génération Z, facteur humain, IA générative.

Introduction

The metaphorical expression ‘academic fraud pandemic’ is effective. Through a combination of narrative simplicity, cognitive clarity and emotional resonance, it draws attention to a major problem affecting academia as a *whole*[2] that, until recently, was not widely recognised. Fraud would be serious in any context, but it is especially critical in academia. It directly affects its core, its primary function of producing, preserving and transmitting scientific knowledge, as it violates the fundamental and founding principles of science, including the search for truth, honesty, transparency and responsibility. In this sense, fraud undermines the integrity and credibility of the academic community. It also undermines academic institutions ’pedagogical function of educating, training and promoting critical reflection.

Used ironically in this text, it is not intended to cause alarm, fuel panic or oversimplify a highly complex social phenomenon. The aim is simply to draw attention to the problem itself by postulating that there are fundamental differences between fraudulent behaviour at the end of the 20th century (or earlier) and the scale to which the phenomenon has grown in the 21st century. The metaphor of ‘contagion’ emerges within this specific framework. In the fields of psychology and sociology, the concept has proven to be a valuable tool for elucidating the propagation of ideas, behaviours or trends within groups, communities and societies in a manner that is analogous to the dissemination of infectious diseases. It is in this context that the phenomenon of epidemics of narcissism (Vater et al., 2018), obesity (Caballero, 2007) and myopia (Dolgin, 2015) can be discussed. Although it is imperative to acknowledge that a

[2] The term ‘academic fraud’ (along with associated notions such as academic dishonesty and academic misconduct) is frequently employed to denote actions on the part of students that contravene the anticipated norms of a university or other educational institution. Nevertheless, in this text, a more extensive interpretation has been adopted. It is proposed that the term will refer to deliberate acts of deceit, dishonesty, or misrepresentation carried out in research, teaching, or scholarly work, with the aim of gaining an unjustified advantage or undeserved acclaim. This definition encompasses researchers, teachers and students, and its primary forms, such as research misconduct (which includes plagiarism, fabrication and falsification of data) and other unethical practices (for example, duplicate publication, ‘salami slicing’, suppression of negative results or selective reporting), undeclared conflicts of interest in research or peer review), as well as misrepresentation (for example, falsifying authorship, as in ghostwriting or honorary authorship) and cheating in academia (exam cheating and contract cheating, as in essay mills and ghostwritten theses).

thorough description of a phenomenon merely signifies the initial phase in its scientific inquiry, preceding comprehension and, where feasible, explanation.

However, addressing academic fraud as a social phenomenon is not easy, particularly when it comes to taking that first step. On the one hand, the clandestine nature of the group engenders a certain degree of invisibility. Conversely, in contradistinction to obesity or myopia, for instance, it is challenging to define, let alone operationalise and measure with rigour and objectivity.

This phenomenon is yet more challenging to apprehend. Academic institutions should, in principle, be bastions of integrity and honesty, as their primary objective is to disseminate truth and knowledge. Consequently, the occurrence of dishonesty and fraud within academic settings would appear to be an anomaly. Secondly, social phenomena tend to be very complex — even those that appear simple, as they typically result from underlying factors. The phenomenon of academic fraud is, in fact, extremely complex. Attempting to comprehend it as a simplistic, unidimensional phenomenon is a futile endeavour. A multi-faceted approach is requisite, with the epistemic subject (the human researcher) serving as the point of departure.

This text aims to provide a brief yet broad reflection on the various causes of fraudulent behaviour in the organised world of higher education, research and scholarship. These causes are categorised according to their nature: technological, social or cultural, epistemological and psychological. While the aforementioned causes and categories are important and possess varying degrees of explanatory power, it can be argued that the psychological dimension is the most relevant for explaining the logical contradiction mentioned above, particularly when the phenomenon reaches pandemic proportions. Firstly, for dishonesty to exist, there must be dishonest individuals. Conversely, academia cannot exist without academics (epistemic subjects) and the work these professions require tends to necessitate specific cognitive and personality traits to be productive and successful. These traits include patience, persistence, the ability to delay gratification, and the capacity to project oneself into the future.

Science and dishonesty: A fundamental contradiction

From its earliest beginnings, science has been shaped by the ambition to uncover the truth about our world. However, the relationship between science and truth is far from straightforward. Rather than being a static collection of certainties, science is a dynamic, self-correcting endeavour. As Poincaré (1908) noted, “science is built up with facts, as a house is with stones. But a collection of facts is no more a science than a heap of stones is a house” (p. 168). On the other hand, science can be considered a complex adaptive system, as defined by Murray Gell-Mann. Not only is it complicated (i.e., composed of multiple parts, where the whole cannot be reduced to its parts), but it is also capable of learning, evolving, and responding to changes in its environment (Gell-Mann, 1994).

Science has produced knowledge that is amongst the most reliable that humankind has ever created; however, it is important to acknowledge that all of the scientific establishment's assertions are provisional and that theories are merely approximations of final truths. In order for the scientific community to advance, honesty must prevail. The principle of honesty is the guiding principle that informs the process. Should the integrity of the data be compromised, or should the results prove to be less than satisfactory, the result will be the loss of the compass. It is imperative to acknowledge that the refinement of scientific models is contingent upon the identification and documentation of failures, anomalies and uncertainties. This process is of paramount importance. In this sense, honesty can be regarded not only as a moral virtue, but also as a practical necessity if science is to fulfil its mission. The pursuit of truth is predicated on honesty, and an absence of honesty in the search for truth will inevitably result in its collapse. Irrespective of the sophistication of the experiment or the ingenuity of the theory, an accurate report is essential for comprehension. Science is therefore predicated on a fragile yet vital agreement: that observations will be described as they are. In the scientific community, honesty is defined by more than the mere avoidance of scientific misconduct. This process entails the ability to resist the insidious allure of self-deception, to acknowledge the inherent limitations of knowledge, and to present results as they are, rather than as one wishes them to be.

This suggests that science is one of the human endeavours most resistant to dishonesty, fraud and deception. However, academic dishonesty is also a complex adaptive system in itself. Indeed, even a cursory examination of history is sufficient to

conclude that academic fraud is a long-standing phenomenon, despite its scope being confined for many centuries. However, and most significantly, it has undergone substantial evolution over the centuries, aligning with the advancements in academia, particularly following the dissemination of personal computing in the 1970s and, remarkably, since the late 2010s and the advent of generative AI.

Academic fraud: From Martial to AI language models

The word ‘academia’ comes from Plato’s Academy, one of the earliest known institutions devoted to the pursuit of knowledge. This means that academia has been around for over 2,300 years. The word ‘plagiarism’, meanwhile, was coined by Martial around 100 CE, when he complained that another poet had ‘stolen’ his verses and urged that he be denounced to shame the plagiarist (*impones plagiario pudorem*[3]) long before Erasmus of Rotterdam satirised plagiarists in the 16th century (Bacqué & Urbano, p. 53). As it is an ancient problem in literature and the fine arts, it is necessarily an ancient problem in academia. In fact, it is much older than the oldest of universities.

As extensively documented, plagiarism represents just one example of the various forms of dishonesty and fraud that are impacting academia today. This phenomenon is, as with many such behaviours, dynamic, adaptable and complex, and is subject to constant evolution. This remains valid even when the scope of the analysis is restricted to the last fifty years. For instance, when Umberto Eco wrote *How to Write a Thesis* (1977), he could not have foreseen how his words would be interpreted five decades later. In fact, outside the context of the time, his ironic advice to copy a thesis already done a few years earlier at *another* (but not the same) university (p. 27), risks being taken literally, thereby losing its humorous tone, despite the obvious irony of the author and the explicit paradoxical nature of the advice.

Indeed, a considerable amount of change has occurred in the past fifty years. The period under discussion saw the emergence of the so-called ‘1977 trinity[4], which initiated the microcomputer revolution and engendered a perpetual transformation of

[3] ‘Shame the plagiarist’.

[4] This term was coined by *Byte* magazine in September 1995, to mark the launch of three landmark microcomputers that, together, crystallised the concept of the personal computer as a consumer product: The Apple II, the Commodore PET and the RadioShack TRS-80. These three machines set technical and commercial standards for all subsequent personal computers in an extremely short period of time.

the IT landscape in technological, economic and social respects. Notwithstanding the fact that the term ‘revolution’ should be avoided due to its excessive and hyperbolic use, in this case there is no obvious alternative. Personal computers were indeed revolutionary (and not merely evolutionary) in the sense that they transformed almost everything at the same time, giving rise to entirely new ways of working, playing and communicating. Even plagiarism[5].

In a second phase, they increased their reach while continuing to facilitate it. From the mid-1990s onwards, the phenomenon of the World Wide Web allowed generalised access to the internet. This went from being almost non-existent at the beginning of that decade to almost omnipresent[6], providing access to an ever-increasing number of sources that could be copied. This has been further amplified by the fact that publishers of scientific literature and universities themselves have embraced the web phenomenon by starting to digitise their previous print-based publications and publish directly in digital format. In practice, the opportunities for ‘simple plagiarism ’have increased exponentially due to widespread (though not always free) instant and anonymous access to ever-larger digital archives of specialised literature, including dissertations, theses, scientific articles, book chapters, entire books, manuals and encyclopaedias. It is important to note that neither of these two phases resulted in a significant increase in plagiarism or plagiarists. The estimation of such numbers is always difficult. However, as time progressed, there was a subsequent shift in its *modus operandi*. The phenomenon evolved from simple forms of plagiarism, such as ‘verbatim plagiarism’,’ to more sophisticated and less overt forms. These include mosaic plagiarism, paraphrasing, and self-plagiarism.

The third phase is challenging to correlate with a specific, datable occurrence. However, to avoid oversimplification of such a complex phenomenon, it is possible to posit that it was a transformation from quantity to quality. The progressive escalation in the (ever-increasing) number of (easily accessible) sources of knowledge

[5] Clearly, computers did not create academic plagiarism. However, they have modified its modus operandi in a far-reaching and profound way. Initially, computers greatly facilitated plagiarism: copying a sentence, a paragraph or even dozens of pages now takes literally a second and involves little work or effort. More precisely, they facilitated ‘simple plagiarism' or ‘verbatim plagiarism,’ through ‘copy and paste.’

[6] All this happened in just a few years: according to Roser (2018), estimates for 1990 suggest that only 0.5 per cent of the world’s population was online, in sharp contrast to what happened just a decade and a half later, with figures above 75 per cent in many Western countries. For example: USA (76%), France (86%), South Korea and Japan (93%) Denmark and Norway (97%).

culminated in a ‘critical threshold. ’In particular, new forms and behaviours emerged. For instance, the marked intentionality and growing sophistication of means progressively replaced the previous, relatively naïve, often opportunistic or residual forms. Furthermore, novel phenomena have come to the fore, including predatory journals and new agents such as human actors, economic interests, systems of hegemonic power that are challenging to identify, and even countries with no prior tradition of scientific research.

The fourth phase is of a particularly recent vintage, having emerged within the recent past and being observable in the present. It is temporally concomitant with the emergence and popularisation of large-scale language models in the form of conversational agents. These agents are based on generative AI and are capable of producing coherent and contextually relevant texts that are increasingly similar to, or indistinguishable from, those produced by human beings. The majority of aspects pertaining to this phenomenon remain to be studied, described, and understood; in other words, they are *terra incognita*. The prevailing conditions have been identified as those conducive to the escalation of plagiarism and associated fraudulent practices, particularly in view of the potential for their uncontrolled proliferation.

Academic fraud: The role of society and culture

Despite the existence of a persuasive body of anecdotal evidence suggesting that computers and associated technologies facilitate plagiarism and other forms of dishonest practice, it is important to recognise that these technologies did not originate such practices. Instead, they have been employed to enable their proliferation. However, the responsibility for this pandemic of academic fraud cannot be attributed to them.

The same cannot be said of numerous social factors that characterise the reality of 21st century academia, and which directly or indirectly foster or encourage the use of fraud. As mentioned earlier, the tyrannical and long-standing pressure to publish is directly implicated in various unethical practices, as well as fostering other phenomena such as predatory journals (Bacqué & Urbano, 2025). In accordance with the observations of Bok (2003), it is also pertinent to note the escalating commercialisation

of universities, propelled by market forces, which is progressively eroding the fundamental values and integrity of higher education. In the same vein, excessive concern with academic productivity, as well as the misuse of metrics to quantify it, lies at the root of numerous examples of misconduct, as per Campbell's Law. Similarly, without intending to be exhaustive, it is also possible to mention the active role played by some 'emerging 'and/or 'predatory' economies, whose institutional maturity is questionable. A salient feature of their accelerated industrialisation and economic growth has been the aggressive appropriation of the intellectual property of others, including their work, creativity, ideas, concepts and designs. This practice concerns not only industry and technology, but also science. Scientific fraud is one example of this, having become pronounced or rampant in some of these countries, at least since the early 2000s, and which can be gauged by indicators such as high rates of scientific article retraction, often related to misconduct involving data fabrication and falsification, plagiarism, and false peer reviews (Castillo, 2014; Rivera & da Silva, 2021; Van Noorden, 2023). And there would be much more to say on this topic, including the emergence and spread of predatory journals or paper mills (Else & Van Noorden, 2021; Grudniewicz et al., 2019; Ro & Leeming, 2025; Sanderson, 2024).

Indeed, the role of society and culture is crucial to understanding the phenomenon of academic fraud. The pressure on academia to produce results is a consequence of the general trend of consumerism and mass production identified by Lasch (1985). Therefore, scientific research has also begun to produce goods for immediate consumption. The compulsion to obtain the 'latest innovation' of electrical appliances or hi-fi equipment, as described by Lasch (1985), has spread to the 'state of the art' in scientific literature, encompassing new trends in topics explored or methods employed. In both cases, 'their value lies not in their usefulness or permanence but in their marketability' (Kobo edition, Chapter 1) This change was accompanied by a phenomenon known as 'Taylorisation', which refers to the process of reducing scientific research to a more accessible and simplistic form, thereby diminishing its complexity, originality and autonomy. This transformation has been observed to occur at the expense of the depth and complexity that characterise scientific research in its original state. In other words, as was the case with factory work in the early 20th century, the 'Taylorised science' had profound direct implications for 21st-century academia. The aforementioned implications encompassed the enhancement of

efficiency and standardisation in research methodologies, alongside the imposition of metrics and the cultivation of productivity pressures. The emergence of perverse incentives, such as the ‘publish or perish ’mentality, was also a consequence. Indirect implications of the aforementioned factors included the alienation experienced by many researchers and the depletion of their expertise. The advent of specialisation and division of labour, accompanied by the breakdown of complex tasks into repeatable, quantifiable steps, has effectively rendered expertise in a specific domain accessible to a considerable proportion of the population.

Academic fraud: The emergence of new participants

It is evident that not all branches of science have been affected in equal measure by successive revolutions in science, technology, and society over the past three or four centuries. The exact sciences are less prone to various forms of academic dishonesty due to the nature of their research subjects. While the possibility of fraud persists, it becomes more straightforward to detect and expose in these sciences, which are both more established and more firmly anchored. The aforementioned sciences have also witnessed the development of enhanced mechanisms for verifying, validating or refuting conjectures, hypotheses and results.

Similarly, truly experimental sciences — not just empirical ones — are also more protected from fraud. This is because it is easier to implement objective methods of manipulating variables, rigorous ways of observing reality, and relatively simple methods of replicating procedures and methods to confirm (or not) the obtained results. However, this does not mean that they are free of other problems. For example, new technological resources and instruments (including those enabled by AI) often allow for mass production as if it were a factory process. This tends to compromise or annul the epistemological value of the results and (supposed) knowledge. Similarly, in some of these sciences, including the natural and life sciences, simplified and stereotyped methodological models are often used. There are even routines or ‘templates ’that just need to be repeated. This makes it possible to produce material for a scientific article in a few days without resorting to plagiarism or other fraudulent practices, even though epistemological value of the latter is reduced or even absent.

In contrast, substantial components of the social sciences and humanities are situated at the opposite pole of the spectrum. For instance, the fabrication and falsification of data can have a significant impact on the natural and life sciences, particularly biomedical research, where the pressure to publish and obtain funding is high. However, such practices appear less applicable in the humanities, where the pressure to publish is significantly less pronounced. The subject is too extensive to be addressed in this discussion, but it can be argued that these sciences tend to be less certain and have fewer verification mechanisms due to various limitations relating to their state of development and the characteristics of their objects of study. Galbraith's observations in 1958 concerning the social and economic sciences, that they allow one to hold a belief without the need to demonstrate it, can also be applied in this context. The consequence of this state of affairs is that, within the humanities and social sciences, while the fabrication of data remains a possibility (a phenomenon exemplified by the work of Diederik A. Stapel[7] in the domain of social psychology; Callaway, 2011), there will be an inclination towards the adoption of other practices that are equally, if not more, dubious. These include *p*-hacking (data dredging) and HARKing (Hypothesizing After the Results are Known).

In other words, the stage of development of a science has been shown to render it more or less vulnerable to societal pressures and cultural trends. When considering this alongside the phenomenon of 'Taylorised science 'or a dominant culture organised around mass consumption — which, according to Lasch (1985), encourages narcissism — a more complete understanding of the arrival of new participants in academia, both individually and collectively, including those who did not historically engage with it, can be achieved. A contributing factor to this phenomenon is the perception of a career in academia as both accessible and appealing, a notion that has been further perpetuated by a misguided or excessively idealised depiction of science and scientists, prevalent in stereotypical representations found in global television, films and social networks. While there are several other social, cultural or individual reasons that also explain the worldwide expansion of tertiary education[8] and scientific

[7] "When colleagues called the work of Dutch psychologist Diederik Stapel too good to be true, they meant it as a compliment. But a preliminary investigative report (go.nature.com/tqmp5c) released on 31 October gives literal meaning to the phrase, detailing years of data manipulation and blatant fabrication by the prominent Tilburg University researcher" (Callaway, 2011).

[8] For example, the OECD's "Population with Tertiary Education" indicator shows that, in recent years, ~41.2% of 25- to 64-year-olds in OECD countries have a tertiary qualification. This proportion was considerably lower half a century ago, at around 6% in 1970 (World Bank, n.d.; Our World in Data/Ritchie, 2023).

research[9] — including global population growth and economic development— this phenomenon is still worth considering.

It is evident that not all new entrants possess the necessary cognitive characteristics, personality type or motivations that are suitable for the academic profession. Without resorting to idealisation of either academia or science, and without asserting the existence of a singular academic or scientific profile, it is evident that the pursuit of work within these domains often demands the presence of specific mental attributes for optimal productivity and success. To illustrate this point, the capacity to systematise can be regarded as a pivotal cognitive instrument in the process of navigating intricate accumulations of raw data in pursuit of discernible structures, including patterns, regularities, and periodicities. As stated by Medawar (1963), the notion of a singular scientific mind may be a fallacy[10]. However, it is important to acknowledge that the ability to engage in scientific research and practice is predicated on the possession of this capacity (Urbano, 2021, p. 33). In addition to these cognitive characteristics, others have been posited that pertain to personality and the inherently frustrating nature of scientific research and the profession itself. A scientific career is often a lifelong commitment that offers minimal financial compensation or public recognition. It frequently entails extended periods of uninterrupted dedication, with limited opportunities for personal time off (Bacqué & Urbano, 2025). It is legitimate to question whether the evident psychological vulnerabilities of these new members will render them more susceptible within an academy under pressure to produce immediate, quantifiable outcomes. Should this be the case, there is a possibility that they may be more inclined to resort to ethically questionable practices.

A more salient issue, however, pertains to the psychopathological profile of some prospective participants, which may encompass individuals predisposed to fraudulent behaviour, including those diagnosed with antisocial personality disorder —often

[9] According to the *UNESCO Science Report* (2021), the number of scientists worldwide grew by 13.7% between 2014 and 2018, reaching about 8.8 million.

[10] “There is no such thing as a Scientific Mind. Scientists are people of very dissimilar temperaments doing different things in very different ways. Among scientists are collectors, classifiers and compulsive tidiers-up; many are detectives by temperament and many are explorers; some are artists and others artisans. There are poet-scientists and philosopher-scientists and even a few mystics. What sort of mind or temperament can all these people be supposed to have in common? Obligative scientists must be very rare, and most people who are in fact scientists could easily have been something else instead” (Medawar, 1963, p. 850).

designated as ‘psychopaths’ or ‘sociopaths’[11]— given the propensity for dishonesty that characterizes these conditions.

It is evident that dishonesty does not manifest exclusively within any specific personality type or disturbance. Nevertheless, it is a common occurrence among individuals who are deemed to be clinically disturbed and who demonstrate antisocial tendencies, in addition to deficiencies in empathy, remorse, and guilt. These individuals often engage in dishonest behaviour when they perceive a potential benefit[12]. Despite the lack of scientific evidence suggesting an increase in the prevalence of psychopathy or sociopathy in absolute terms[13], further research is required to determine whether their relative prevalence in academia has changed. Such individuals have traditionally been considered unsuitable for scientific careers, either due to a perceived lack of interest or motivation, or a manifest lack of the necessary skills. Nevertheless, the emergence of novel demographic, economic or sociocultural realities has the capacity to profoundly influence this dynamic, thereby modifying the conditions of access to scientific practice.

Conclusion

It is imperative to recognise that academia cannot be considered as an isolated entity; consequently, any analysis of the intricate social phenomenon of academic fraud must be conducted with a thorough understanding of the profound global transformations that inexorably impact it. For instance, the phenomenon of the ‘Taylorisation’ of scientific research, which, by stripping it of meaning, creativity and autonomy, has been simplified to the point of becoming accessible to people, whose cognitive and

[11] Psychopathy and sociopathy are not recognised as formal psychiatric diagnoses, despite their historical presence in early psychiatry and their continued prevalence in popular discourse. The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) employs the term ‘Antisocial Personality Disorder’ in lieu of the previously utilised designation (American Psychiatric Association, 2013), whereas the *International Classification of Diseases,* 11th Revision (ICD-11) uses the term ‘Dissocial Personality Disorder’ (World Health Organization, 2019).

[12] Consequently, despite the absence of a linear causal relationship, this personality disorder is frequently observed in individuals who engage in delinquent behaviour or are incarcerated.

[13] For example, a meta-analysis of Western adult populations reports that 12.16% have any personality disorder. Within that, Cluster B disorders (which include ASPD) have prevalence rates between 5.5% and 7.2%, though ASPD specifically often appears at the lower end (Volkert et al., 2018). Instead, an increased awareness, discourse and cultural framing of antisocial traits is observable, particularly within the domains of politics, business and media.

personality profiles would not normally guide them in that direction.

The phenomenon of academic dishonesty or academic misconduct cannot be explained only by the personality or psychological profile of those who engage in it. However, this constitutes a solid foundation for the description, comprehension and, if feasible, explanation of the phenomenon. The fundamental basis of academia and science is the result of human effort, motivation and aspirations rather than that of laboratories, instruments or methods. The foundation for this endeavour must be the study of human beings.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing

Bacqué, M-F., & Urbano, P. (2025). Les nouvelles représentations mentales du travail universitaire : le cas des générations Y et Z. In M. Bergadaà & P. Peixoto (Dirs.), *Réinventer l'intégrité académique à l'ère de l'intelligence artificielle* (pp. 51–65). EMS Éditions.

Bok, D. C. (2003). *Universities in the marketplace: The commercialization of higher education.* Princeton University Press.

Caballero, B. (2007). The global epidemic of obesity: An overview. *Epidemiologic Reviews, 29*(1), 1-5. https://doi.org/10.1093/epirev/mxm012

Callaway, E. (2011). Report finds massive fraud at Dutch universities. *Nature 479*(15). https://doi.org/10.1038/479015a

Castillo M. (2014). The fraud and retraction epidemic. *AJNR. American journal of neuroradiology, 35*(9), 1653–1654. https://doi.org/10.3174/ajnr.A3835

Dolgin, E. (2015). The myopia boom. *Nature, 519*(7543), 276–278. https://doi.org/10.1038/519276a

Eco, U. (1977). *Come si fa una tesi di laurea: Le materie umanistiche.* Bompiani

Else, H., & Van Noorden, R. (2021). The fight against fake-paper factories that churn out sham science. *Nature, 591*(7851), 516–519. https://doi.org/10.1038/d41586-021-00733-5

Galbraith, J. K. (1958). *The affluent society.* Houghton Mifflin.

Gell-Mann, M. (1994). Complex Adaptive Systems. In *Complexity: Metaphors, Models, and Reality* (pp. 17–45). Addison-Wesley.

Grudniewicz, A., Moher, D., Cobey, K. D., Bryson, G. L., Cukier, S., Allen, K., Ardern, C., Balcom, L., Barros, T., Berger, M., Ciro, J. B., Cugusi, L., Donaldson, M. R., Egger, M., Graham, I. D., Hodgkinson, M., Khan, K. M., Mabizela, M., Manca, A., … Lalu, M. M. (2019). Predatory journals: No definition, no defence. *Nature, 576*(7786), 210–212. https://doi.org/10.1038/d41586-019-03759-y

Lasch, C. (1985). *The minimal self* [Kobo eBook]. W.W. Norton.

Martial. (1993). *Epigrams, Volume I: Spectacles, Books 1–5* (D. R. Shackleton Bailey, Ed. & Trans.). Loeb Classical Library 94. Harvard University Press.

Medawar, P. B. (25th October 1963). Hypothesis and Imagination. *The Times Literary Supplement* (pp. 849–850).

Poincaré, H. (1902). *La Science et l'Hypothèse.* Flammarion.

Ritchie, H. (2023). *Global education (Our World in Data).* https://ourworldindata.org/global-education.

Ro, C., & Leeming, J. (2025). Authorship for sale: Nature investigates how paper mills work. *Nature,* https://doi.org/10.1038/d41586-025-01824-3.

Roser, M. (2018). The internet's history has just begun. *Our world in data.* https://ourworldindata.org/internet-history-just-begun

Rivera, H., & da Silva, J. A.T. (2021). Retractions, fake peer reviews, and paper mills. *Journal of Korean medical science, 36*(24), e165. https://doi.org/10.3346/jkms.2021.36.e165

Sanderson, K. (2024). Science's fake-paper problem: High-profile effort will tackle paper mills. *Nature, 626*(7997), 17–18. https://doi.org/10.1038/d41586-024-00159-9

UNESCO. (2021). *UNESCO science report: The race against time for smarter development.* United Nations Educational, Scientific and Cultural Organization.

Urbano, P. (2021). *Ver mais longe. Dois ensaios sobre Ciência.* CEIS20/IUC. https://hdl.handle.net/10316/113230

Van Noorden, R. (2023). More than 10,000 research papers were retracted in 2023—A new record. *Nature, 624*(7992), 479–481. https://doi.org/10.1038/d41586-023-03974-8

Vater, A., Moritz, S., & Roepke, S. (2018). Does a narcissism epidemic exist in modern western societies? Comparing narcissism and self-esteem in East and West Germany. *PLOS ONE, 13*(1), e0188287. https://doi.org/10.1371/journal.pone.0188287

Volkert, J., Gablonski, T. C., & Rabung, S. (2018). Prevalence of personality disorders in the general adult population in Western countries: systematic review and meta-analysis. *The British journal of psychiatry: the journal of mental science, 213*(6), 709–715. https://ddoi:10.1192/bjp.2018.202

World Bank. (n.d.). *School enrollment, tertiary (% gross).* World Development Indicators.

World Health Organization. (2019). *International classification of diseases for mortality and morbidity statistics* (11th revision). World Health Organization.