Piracy? What Piracy?

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Abstract

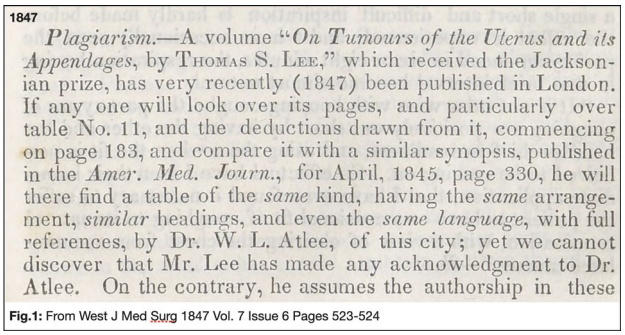
In discussing piracy herein, the reference is not to historical maritime raiders bestowed with titles by the British Empire, such as Sir Francis Drake, who appropriated gold from the Spaniards, themselves having previously stolen it from indigenous peoples ("Indians"). The act of pilfering from thieves is presently regarded with skepticism and presents distinct ethical quandaries. Rather, my focus pertains to instances wherein scientific and medical publications/ideas have been unlawfully appropriated. One might assume that such occurrences are antiquated or, at the very least, obsolete in contemporary times. Regrettably, they persist. Wherever opportunities emerge, certain transgressions ensue, irrespective of their moral permissibility. The adage "opportunity makes a thief" holds true. Within this discourse, I will scrutinize and evaluate specific behaviors exhibited by authors affiliated with publishing entities and those commonly termed "pirates". Various measures exist to comprehensively safeguard intellectual property against misappropriation. These encompass strategies such as confidentiality, distrust, heightened security awareness, precautionary measures, exercise of prudence, and the utilization of pre-print servers, among others.

Keywords: piracy, secrecy, mistrust, awareness of security, precautions, pre-print servers

Introduction

Since time immemorial, information has been transmitted in writing. From the origins of cave paintings to the present-day quantum computers, much if not all is copied. This, in itself, is not inherently negative. However, a certain moral dimension arises when authorship is not clearly attributed, thereby allowing the "copier" or "copyist" to present the copied work as their own achievement.

Even in the mid-19th century, issues concerning plagiarism, copying, and the unauthorized publication of other physicians' findings were already



1847

Plagiarism.—A volume "*On Tumours of the Uterus and its Appendages*, by Thomas S. Lee," which received the Jacksonian prize, has very recently (1847) been published in London. If any one will look over its pages, and particularly over table No. 11, and the deductions drawn from it, commencing on page 183, and compare it with a similar synopsis, published in the *Amer. Med. Journ.*, for April, 1845, page 330, he will there find a table of the *same* kind, having the *same* arrangement, *similar* headings, and even the *same language*, with full references, by Dr. W. L. Atlee, of this city; yet we cannot discover that Mr. Lee has made any acknowledgment to Dr. Atlee. On the contrary, he assumes the authorship in these

Fig.1: From West J Med Surg 1847 Vol. 7 Issue 6 Pages 523-524

recognized. (23, Fig.1)
Searching PubMed for the terms "plagiarism" or "piracy" yields the oldest result from 1847 in the Western Journal of Medicine and Surgery. Here, a particularly scandalous case is described, where an author was awarded a prestigious medical-scientific prize for plagiarizing on the topic of gynecological tumors. In this article, public outcry is directed at the fact that the author of the plagiarism had copied verbatim from an article published two years prior. Furthermore, patient cases from the source article's tables were presented as his own "original" cases (23). In the esteemed journal Science in the year 1897, Beman and Smith engage in a discussion on whether being a victim of plagiarism is considered a compliment or not (22). In the same journal, in the year 1927, A. A. Ivanoff refutes suspicions of plagiarism against Otto Struve regarding the discovery of a new type of double star systems exhibiting irregular motions (21). In the year 1994, Addeane S. Caelleigh 199), editor of the Journal Academic Medicine quotes that maybe half of university-level complaints involve plagiarism.
The academic sphere revolves around ideas, with both informal and formal reward systems emphasizing the importance of giving due credit for original work (18). Plagiarism, the act of presenting someone else's work as one's own, is widely condemned in academia. It constitutes a serious offense as it involves the misappropriation of an academic's most precious asset: intellectual contributions to their field and the broader community of scholars. When a plagiarist passes off another person's ideas (expressed in words) and actions (described in works) as their own, they wrongfully claim authorship (18, 19, 20).
In 2002, Michael J. Zigmond and colleagues (17) asserted that "small offenses", so-called "little murders", often referred to as misdemeanors, when accumulated, can inflict significant harm, primarily because they can lay the pseudo-moral groundwork for more serious crimes in the future (16, 17).

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In 2023, two abdominal surgeons from the Indian Medical College in Bengaluru, in a correspondence note to the BJS, point out what they believe to be a case of self-plagiarism (8). They highlight two very similar publications from the same research group, discussing the same patient cohort and outcome, appearing in two different high-ranking scientific medical journals in the same publication year (1, 2, 8). The editors' concise reply, stating, "The BJS editors are satisfied that no self-plagiarism has occurred here. There is inevitable overlap of words when more than one trial result is published," reflects a regrettable absence of humility and a failure to grasp the essence of the inquiry posed. If the discerning reader doubts my statement, they are encouraged to form their own opinion and compare the articles in question from Fig. 2 themselves.

Don't lie, cheat or steal

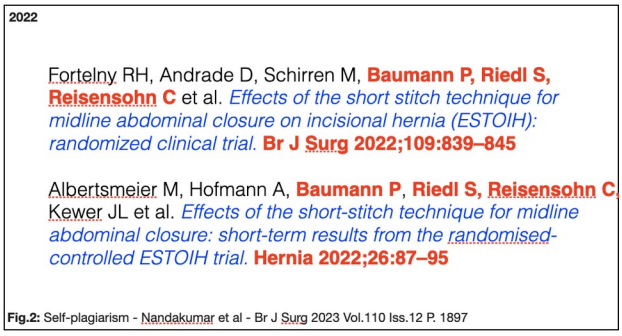
One of the most commonly known ethical prin-ciples from the Bible is encapsulated in the phrase "Do not lie, cheat, or steal!" Scientific research operates on the foundational pillars of academic integrity and adherence to ethical principles.

Nevertheless, instances of plagiarism and other forms of misconduct have emerged as significant challenges, eroding the credibility of the scientific community. Consequently, there is a growing recognition and focus on addressing these issues in contemporary discourse (4). Large-scale plagia-rism has been identified in over 6,500 Russian dissertations (6, Tab.1), leading to the conclusion that plagiarized texts are predominantly found in the fields of economics, pedagogy, and law, follo-wed by medical sciences, political sciences, engineering, and social sciences (6).
In contrast, instances of plagiarized dissertations are infrequent in physics and mathematics (6).

Globalization of academic disciplines = share of publications indexed in the global citation database in the overall output of academic disciplines vs. borrowed text

Discipline	Globalization (%)	Median for borrowed text (%)
Physics and math	45.54	6.2
Chemistry	29.32	20.68
Biology	13.22	11.96
Earth science	11.48	8.69
Technical	9.75	14.38
Agriculture	4.79	29.12
Medicine	2.71	15.16
Economics	1.82	18.26
Philosophy	1.59	8.6
Psychology	1.11	12.71
History	1.08	10.29
Sociology	0.89	12.24
Political science	0.89	11.93
Education	0.58	15.27
Literature	0.51	6.86
Law	0.21	25.61

Tab. 1: Globalization by disciplines from K. S. Guba, A. O. Tsivinskaya (6)


2022

Fortelny RH, Andrade D, Schirren M, **Baumann P, Riedl S, Reisensohn C** et al. *Effects of the short stitch technique for midline abdominal closure on incisional hernia (ESTOIH): randomized clinical trial.* **Br J Surg 2022;109:839–845**

Albertsmeier M, Hofmann A, **Baumann P, Riedl S, Reisensohn C,** Kewer JL et al. *Effects of the short-stitch technique for midline abdominal closure: short-term results from the randomised-controlled ESTOIH trial.* **Hernia 2022;26:87–95**

Fig.2: Self-plagiarism - Nandakumar et al - Br J Surg 2023 Vol.110 Iss.12 P. 1897

On the flip side, research institutions often foster a "publish-or-perish" environment, which may incentivize authors to take shortcuts in order to meet heightened demands (3, 4, 5). Research indicates that while global editors have generally endorsed mainstream ethical standards, the adherence to these standards among non-Anglophone individuals tends to be slightly less stringent compared to Anglophones (6). Researchers have documented instances where universities manipulate data to enhance their standings (11) in international rankings, publishers establish predatory journals willing to accept nearly all submissions, and individuals employ gaming tactics such as text recycling and self-citations to bolster their prospects for career advancement (5, 6, 12, 14).

Harvard president's resignation 2023

The case Claudine Gay - A campaign to discredit Harvard's first Black woman president?

Plagiarism has garnered widespread attention since the latter part of 2023, following allegations against Claudine Gay, President of Harvard University, regarding the appropriation of sections from her 1998 doctoral dissertation. It's noteworthy that this dissertation had previously earned her a prestigious Harvard award for the best essay or dissertation in the field of political science (1, 2, 7). The primary evidence supporting the accusations against Claudine Gay stemmed from the uncritical dependence on software programs like iThenticate® without thorough examination. Plagiarism exists across a spectrum, ranging from minor infractions to blatant violations. Consequently, penalties should be tailored to reflect the severity of the offense (2, 7). Claudine Gay's actions constituted a series of minor instances, none of which were of a signifi-cantly

egregious nature (1, 7). The punishment she received far exceeded the gravity of her transgressions.

Plagiarism of Text (verbatim)

Detection of text plagiarism primarily relies on identifying text similarity. Several online platforms offer free text similarity checks, such as eTBLAST (http://etest.vbi.vt.edu/etblast3) and Turnitin (https://www.turnitin.com/). However, the most robust platform, equipped with the largest database for text comparison, is Crossref iThenticate (https://www.ithenticate.com/).

Some journals rigorously (9) assess every submission, rejecting manuscripts at the desk if the text similarity score exceeds a predetermined threshold, typically around 20%. It is demonstrated that text similarity, even up to 30%, does not necessarily indicate text plagiarism, emphasizing that there is no definitive cutoff for text similarity to infer plagia-rism. An editor well-versed in plagiarism assess-ment must meticulously examine the results of text similarity reports to discern whether the similar text constitutes genuine verbatim or not (9, 15). Many commonly encountered phrases are erroneously flagged as verbatim by text similarity software programs (9, 10).

Plagiarism of Idea = Theft

Plagiarism of ideas is unequivocally unacceptable. In the view of nearly all scholars, it constitutes theft. Depending on the field of study, the precise wording of the text, and consequently, text plagiarism, may hold utmost significance (9).

Various paths lead to becoming a successful pirate		
Type	**Motivation**	**Excuse**
Text - verbatim	Too busy, too lazy to cite properly	Unintentional
Idea	Too much temptation due to the beauty of the idea	Lack of ideas, absence of inspiration
Self-plagiarism	Increased publication frequency	Broader dissemination of the idea
Falsification	The data does not provide the desired answer	Pressure from the funder
Fabrication	Collecting one's own data is too challenging	To apply for a grant
Salami slicing	Inflating curriculum vita	My rightful entitlement
Art of omission	Carelessness rather than maliciousness	Preventing others from replicating
Peer-reviewers	Never-ending source of new ideas	Capable of doing better

Tab. 2: Excuses for piracy (1, 2, 6, 13, 17, 18, 22, 23)

As recently occurred in our institute, I can report that one of our aspiring resident physicians sought to publish a completely novel perspective on arti-ficial intelligence in the realm of radiological dia-gnosis. Unfortunately, several journals declined his article citing reasons such as "AI not being within our scope." Four months after his initial submission attempt, an article with an identical idea and approach emerged from another research group, featuring remarkably similar methods and results. Now, one could engage in extensive debate regarding who plagiarized whom. It is worth noting that the journal in which the article was published was one of those that had previously rejected the work of our resident physician. A written request for clarification on this matter was not responded to by the editors.

However, a significant threat to scientific originality arises from peer reviewers, who are continually exposed to novel scientific concepts and may yield to the temptation to appropriate others' ideas due to a shortage of their own, which is quite frankly a human reaction (Table 2; 1, 8, 9, 13, 23).

Could ChatGPT Be the Next Recipient of the Pulitzer Prize?

ChatGPT has the potential to perpetuate and strengthen existing biases present in the data it is trained on, leading to flawed and unjust pre-dictions. Additionally, there is a risk of intellectual property infringement if individuals directly copy and paste data generated by ChatGPT without providing proper citation or acknowledgment (3, 4).

Despite efforts to develop solutions for identifying factual inaccuracies in summarization models, the dynamic nature of summarization systems, metrics, and annotated benchmarks makes factual evaluation a continually evolving concept, making it challenging to make clear-cut comparisons across various measures. Furthermore, most recent advancements in factual detection have been based on summaries from older models rather than newer summarization models. Developing a new algorithm for ChatGPT that generates error-free and original output requires the integration of various techniques and approaches. To achieve this goal, certain steps need to be taken. It is essential to preprocess and cleanse the data before commencing algorithmic training (3).

ChatGPT is often utilized to craft truly exceptional passages of text. The common methods employed to present something in a different light than it actually is may arguably represent the highest form of truth distortion. It is intriguing that ChatGPT can lie without blushing, as the concept of lying implies a moral perspective. A computer system or software lacks a genuine understanding of concepts like morality, ethics, and decency. So far, there is no provision for a true moral authority of any kind within the algorithm. This would be challenging, as determining which moral authorities and criteria to apply presents difficulties.

When asked what ChatGPT would need to do to win the Pulitzer Prize, ChatGPT itself responded to me as follows: "To win the Pulitzer Prize, ChatGPT would need to be able to communicate or produce creative works in a manner that is of outstanding

quality and significance, making a significant contribution to the journalistic or artistic landscape. This could mean, for example, that ChatGPT creates groundbreaking journalistic articles, award-winning novels, or remarkable poetry that is widely recognized for its originality, depth, and relevance."

The widespread and well-paid medical-scientific ghostwriting industry is certainly at high risk of losing its material basis due to freely accessible algorithms like ChatGPT.

Recommendations

Just don't lie, cheat or steal!
No matter what one does, one should do it oneself! It's always challenging to rely on the work of others anyway. No one has claimed it would be easy. Most achievements that have truly advanced humanity did not originate from a nine-to-five job (similarly expressed in an interview with Elon Musk).

One way to protect against intellectual theft is to use so-called pre-print servers, which also docu-ment, when submitting an article, that you were the first to submit this work and any potential thieves can be exposed through the timestamp. In times of deep fake videos and other manipulations on the internet, it will become increasingly important in the future to utilize the new blockchain technology, as we know it from Bitcoin. This technology is based on a specific cryptographic encryption and multiple information storage on globally distributed com-puters, so that subsequent alterations of once published content are no longer possible. This is ensured through decentralized, globally distributed computer nodes.

Discussion:

The scientific environment that young researchers encounter at the numerous academic institutions worldwide ranges from "publish or perish" to paid ghostwriters. However, throughout this spectrum, it is always about monetary benefits. University rankings, rankings of individual departments among themselves, everything is guided by financial interests.
There are numerous unresolved questions that require attention. Without achieving greater consistency in addressing plagiarism, there is a risk of companies, organizations, and individuals exploiting our scientific integrity to advance their own agendas rather than those of pure science.

To all pirates out there, let him who is free from guilt cast the first stone.

Conflict of interest:

The author declares that there were no conflicts of interest within the meaning of the recommendations of the International Com-mittee of Medical Journal Editors when the article was written.

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Acronyms

AI - Artificial Intelligence
ChatGPT - Chat Generative Pre-trained Transformer
BJS - British Journal of Surgery

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