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Humor, Hoaxes, and Software in the Search for Academic Misconduct

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The Office of Research Integrity is hardly renowned for its sense of humor. By contrast, a new generation of independent watchdogs and bloggers interested in academic misconduct employ jokes, pranks, witty pseudonyms, and humorous hoaxes as a part of their critique and as tools of investigation. The new watchdogs represent a significant shift from top-down, bureaucratic, institutionalized detection of academic misconduct toward collaborative discussion, detection, and dissemination. Not only is this work often done for free, but it also is often done with and through humor.¹

Until recently, hoaxes within academia targeted authorities—highly regarded scholars, journals, or disciplines. In 1996, New York University physicist Alan Sokal wrote and submitted an article to *Social Text*. His goal was to test whether a top cultural studies journal in the United States would publish an article rife with nonsensical claims “if (a) it sounded good and (b) it flattered the editors’ ideological preconceptions” (Sokal, 1996). But unlike Sokal’s relatively straightforward hoax, which *Social Text* accepted and published, the bloggers and pranksters discussed in this chapter reveal shams through elaborate jokes and stings, crowd participation, and the creation of fictional personae. Furthermore, while hoaxes as a genre target reputable institutions and figures of authority, contemporary misconduct watchdogs’ hoaxes and jokes take aim at fraudsters with a sense of humor.²

I argue that the detection, critique, and mocking of academic gaming and scholarship have taken a carnivalesque turn. I will discuss changes within the focus of critique by comparing two software-based, scholarly article generators released a decade apart: the Postmodernism Generator, created in 1996, and SCIgen, created in 2005. While the creator of the Postmodernism Generator playfully mocks renowned humanities scholars’ jargon through producing Dadaist computer-generated papers, the

creators of SCIgen aim lower and mock spammish³ conferences by creating computer-generated computer science papers. Through mimicking academic articles, article generators raise questions about the style and content of academic writing, reading, and peer review. As we argue in our introduction to the volume, the increasing emphasis on scholarly metrics has led to the rise of a new type of unambitious academic misconduct, which focuses on gaming metrics or publishing in spammish journals to meet basic requirements for academic employment, retention, and promotion. Academic watchdogs and scholar-pranksters track this shift by humorously targeting fraudsters and so-called predatory journals instead of figures of authority.

Carnavalesque Watchdogs

Contemporary misconduct watchdogs—without institutional affiliation, unconnected to funding agencies—mark a transformation from top-down to bottom-up knowledge production around emerging forms of academic misconduct and metrics-driven gaming. I contend that their work tends toward the carnivalesque since it is marked by crowd participation, anonymity, and various uses of humor.⁴

Crowd-generated knowledge and rumors drive discussion and detection of misconduct. The website Retraction Watch asks the public for “any tips... about the nature of a retraction, expression of concern, or correction” (Oransky, this volume, chapter 10). The short-lived blog “Science Fraud” also used crowdsourcing and knowledge sharing about misconduct. Paul Brookes, a biochemist at the University of Rochester, ran the blog under the pseudonym “Frances de Triusce” (an anagram of “science fraudster”) (Brookes, this volume, chapter 13). Numerous readers emailed him examples of suspected data irregularities and image manipulation. During the six months of its existence, Science Fraud discussed 275 articles (of which 16 were retracted and 47 issued corrections) and credited tipsters by their chosen pseudonym, thanking “*freddy fraudster*,” “an astute reader,” and “*Blotette* (again!).” In part, Science Fraud—which relied on anonymous discussion—was motivated by Brookes’s frustration with the ORI’s slow pace and particularly with their revelation of his identity to the mentor of a postdoctoral scholar, in whose work he had discovered image manipulation. The ORI’s unmasking of Brookes’s identity to the mentor of the scholar accused of fraud pushed Brookes to pursue a mode of critique that would preserve anonymity of participants (including himself).

Watchdogs' anonymity and pseudonymity can create a carnivalesque atmosphere. Anonymity creates a freer space for watchdogs' discussion of and jokes about suspected misconduct. This turn toward disguise recalls Mikhail Bakhtin's discussion of the symbolic meanings of masks used during carnival: "The mask is related to transition, metamorphoses, the violation of natural boundaries, to mockery and familiar nicknames. It contains the playful element of life; it is based on a peculiar interrelation of reality and image" (1984). Pseudonyms, anonymity, and masked IP addresses recall the masks of carnival. Disguises facilitate a range of humorous responses from playfulness, to critique, and to mockery.

Sometimes—as is characteristic of carnival—the watchdogs poke fun at powerful authorities. Anonymity makes it possible for junior scholars to critique established academics without fear of repercussions. For instance, anonymous discussions on Retraction Watch and PubPeer of leading French plant biologist Olivier Voinnet's work revealed his manipulation of images and resulted in his being suspended for two years from the French National Centre for Scientific Research (Guaspere and Didier, this volume, chapter 12).

The online journal club PubPeer allows the public to comment on published papers either anonymously or with their names on their website.⁵ Founded by Brandon Stell and brothers George and Richard Smith in 2012, PubPeer's stated goal "is to foster a scientific environment where robust, high-quality research is valued, while providing a forum to discuss the problems of unreproducible, misleading, misconceived, or fraudulent work."⁶ The post-publication peer review allows for the in-depth discussion of articles.⁷ While PubPeer allows for the public to comment anonymously, the tone of the discussion—unlike other watchdogs I will discuss—remains fairly serious.

The high seriousness associated with university committees and governmental institutions dedicated to ethics and research integrity contrasts with the carnivalesque attitude pervasive in crowdsourced misconduct detection. For instance, Science Fraud titled posts with puns of scientists' names. One blog post titled "Ezzat a paper in your pocket or are you just pleased to see me?" highlighted oncologist Sheeran Ezzat's "creative imagery."⁸ Retraction Watch is equally fond of puns in the titles of their postings: "Warts and All: Derm Pub Retracts Plantar Paper after Author Cries Foul," or "Double trouble: Psych Journal Prints PTSD Paper Twice." Retraction Watch also posts a "leaderboard," ranking authors with the most papers retracted—a snide inversion of the impact factor.⁹

Choosing pseudonyms also offers an opportunity for humor and mockery. Computer scientist Cyril Labbé invented “Ike Antkare” (I Can’t Care) as the fictional author of multiple SCiGen papers, and successfully skewed Google Scholar’s ranking to make Ike Antkare rank above Albert Einstein (Antkare, this volume, chapter 14). Similarly, when Burkhard Morgenstern created fictional scholars to join spammish journals’ editorial boards, he chose ridiculous photos, biographies, and names like Hoss Cartwright from the television series *Bonanza* (Morgenstern, this volume, chapter 15). Dr. Cartwright with his postdoctoral fellowship at “Cowboy University” and current position as “senior cattle manager” graced the editorial boards of various journals from the *International Journal of Agriculture Innovations and Research* to the *Journal of Primatology*.

Hailing from a variety of backgrounds and professional trajectories, the new generation of watchdogs democratizes participation in the detection and discussion of misconduct and blurs the line between “policemen” and “pranksters.” This anti-hierarchical tendency also recalls carnival, which, as Bakhtin asserts, “does not acknowledge any distinction between actors and spectators.... Carnival is not a spectacle seen by the people; they live in it, and everyone participates because its very idea embraces all the people” (Bakhtin, 1984). Carnavalesque critique—facilitated through anonymity and disguises—permits satire, pranks, and derision from the crowd.

Mocking Authority: The Postmodernism Generator

In 1996, a few months before Sokal’s hoax, Andrew C. Bulhak released the Postmodernism Generator and the underlying Dada Engine software. Richard Dawkins calls the generator “a literally infinite source of randomly generated, syntactically correct nonsense, distinguishable from the real thing only in being more fun to read” (1998). Bulhak claims inspiration from Douglas Hofstadter’s best-selling (and Pulitzer Prize-winning) *Gödel, Escher, Bach: An Eternal Golden Braid* (1979), in particular the author’s ideas about recursion. Hofstadter demonstrates a method for producing grammatically correct—but nonsensical—English texts and illustrates it “with an example, a selection of fragments of text, ten of which were generated using a computer program and three which were taken from a journal titled *Art-Language*[,] and a challenge to the reader to identify which ones were generated artificially” (Bulhak, 1996).

The Postmodernism Generator mocks famous scholars of postmodernism, cultural theory, and literary criticism. Bulhak chose these genres

because he thought it “easy to convincingly generate meaningless and yet realistic travesties of works in it” (Bulhak, 1996). Bulhak imagined that “automated travesties of papers in, say, mathematics or physics, would be less successful because of the scientific rigor of these fields” (1996). By contrast, he also discusses how the Dada Engine can be modified to simulate the “ranting of a paranoid schizophrenic street preacher, or perhaps a USENET ranter” or to generate “eccentric pseudoscientific/religious pamphlets” (1996). By titling his technical report “On the Simulation of Postmodernism and Mental Debility using Recursive Transition Networks,” Bulhak draws parallels between the two. He notes that the patterns of “abnormal modes of human communication—such as a restricted specialized field of discourse...—are easier to replicate than normal communication” (1996).

The version of the generator that I accessed online has delivered 14,440,299 essays since it went live in 2000. When I opened the website, Elsewhere.org/pomo, I generated an essay titled, “The Collapse of Culture: Baudrillardist simulacra and constructivism,” co-authored by two nonexistent professors at the University of Illinois and U Mass-Amherst. This essay included lines such as the following: “‘Sexual identity is part of the economy of truth,’ says Sontag. If predialectic textual theory holds, we have to choose between capitalist theory and neocultural narrative. Thus, Lyotard uses the term ‘Baudrillardist simulacra’ to denote a self-sufficient totality.”

Theorist name-dropping, scholars’ names transformed into adjectives—for example, Foucaultian, Debordist—citations, footnotes, sections, and bibliographies all simulate specialized writing, while the generation of the essay through a software program mocks the genres. Through its travesties of papers, which reference major figures of cultural studies and literary theory, the Postmodernism Generator provokes laughter at authorities and fits traditional carnivalesque critique, which aims high rather than low.

Spamming and SCIGen

In 2005, three graduate students at MIT’s Computer Science and Artificial Intelligence Laboratory decided that they had had enough of spammy calls for papers flooding their inboxes. In the tradition of many MIT students, they set up a clever prank. They created SCIGen, software that generates computer science papers, which they could then submit to spammy conferences. The students, Dan Aguayo, Max Krohn, and Jeremy Stribling, worked on the project for a couple of weeks. The capaciously

named World Multiconference on Systemics, Cybernetics, and Informatics (WMSCI, 2005) accepted one of their SCIgen contributions, “Rooter: A Methodology for the Typical Unification of Access Points and Redundancy” as a “nonreviewed” paper for their conference.

After the hoax was revealed, WMSCI withdrew their paper. Like persistent spammers, however, the graduate students did not give up. They raised money to attend and set up a parallel session at the conference hotel in Orlando entitled “Methodologies, Theory, and Information” to prank the conference. Although WMSCI attempted to forbid them from using its name on their fliers and posters advertising their session, the determined grad students persisted. Sporting fake mustaches, wigs, clip-on ties, and white lab coats, Aguayo, Krohn, and Stribling presented from SCIgen slides, which they had not read beforehand.¹⁰ Trying to keep a straight face, they discussed slides with conclusions like:

- Scherzo will address many of the obstacles faced by software engineering
- Prevents the World Wide Web
- We verified that redundancy and e-business can interfere to achieve this aim
- Our application represents a profound advancement to theory

A couple bewildered people sat through some of the PowerPoint karaoke. By wearing costumes, using silly pseudonyms, and reading ridiculous SCIgen presentations, the three MIT students pranked the conference.

SCIgen’s success and popularity derives in part from its being very funny. Its creators wrote humor into the code. Aguayo, Krohn, and Stribling explicitly avoided more sophisticated, technically challenging approaches such as Markov chains because, although they could produce proper syntax, the material could turn out to be dry and boring. In an “Ask Me Anything” on Reddit, Stribling writes, “We literally sat around for two weeks and just brainstormed buzzwords, clauses, paragraph structures and other paper elements just based on what we thought would be funny. That’s the grammar. Then SCIgen itself just goes through the grammar and makes random choices to fill stuff in. That’s why you see things like ‘a testbed of Gameboys’ in the evaluation sections sometimes—we just thought it would be hilarious.”¹¹

The creators intended for SCIgen “to maximize amusement.”¹² Laughing at a SCIgen paper expresses opposition to the appropriation of open access ideals for profitability, the gaming of academic metrics at all levels, and reading’s disappearance from evaluations of scholarly merit. Despite an apparent lack of seriousness, humor critiques and highlights problems



Figure 21.1
Aguayo presenting as Franz T. Shenkrishnan, PhD.

within academia. SCIgen’s creators felt “fed up with all of the bogus journals and conferences that spam researchers and charge crazy fees for articles they don’t even read.”¹³

Against the original intent of its creators, SCIgen also proved popular amongst the journals, conferences, and scholars they intended to mock. Counterfeit journals populate their websites with SCIgen text and scholars submit SCIgen papers to conferences and journals with the hopes of getting published. Labbé discovered SCIgen has been used to generate hundreds of published conference papers (Van Noorden, 2014; Bohannon, 2015) and to game Google Scholar’s rankings with self-citing SCIgen papers (Antkare, this volume, chapter 14). After academic publisher Springer’s embarrassment that their journals had accepted more than 100 SCIgen papers, the publisher hired Labbé to create SciDetect, a computer program to spot SCIgen content.

The founders of SCIgen, however, thought that SciDetect facilitated the continuation of not reading. For Stribling, SciDetect “seems like just a way for them to avoid having real peer review.... There are better ways to solve the problems exposed by SCIgen than just having a detector.”¹⁴ Relying on SciDetect incorporates the technology of critique but not the point of critique: the rise of spammish scholarship and the end of reading in evaluation.

Reading also played a role in one of the SCIgen developer's early projects. As a college student at Harvard, Krohn co-created TheSpark.com, which became SparkNotes. With its cheat sheets summarizing books, SparkNotes promises, "When your books and teachers don't make sense, we do." In their Ask Me Anything session on Reddit, Krohn mentions TheSpark when asked about his favorite programming language: "The original version [of SCIgen] was programmed in ... Perl! I ripped the code off from TheSpark.com's high school English paper generator, which was also written in Perl. It's since been modernized. All of the magic is in the grammar rules though." Like TheSpark promised to eliminate the need for reading the original texts, SCIgen promises to eliminate the need for writing original texts. Both projects relish cracking and reverse engineering text.

While both the Postmodernism Generator and SCIgen generate nonsensical articles as a method for critique, the Postmodernism Generator created articles that poked fun at figures of academic authority. By contrast, the primary target of SCIgen's critique is not the academic elite but rather fraudsters. SCIgen mocks spammish conferences and journals, shoddy reviews, easily manipulated rankings, and metrics-driven academic misconduct. The different targets mark a shift in perceived threats to science from postmodern theorists in the 1990s to spammish science in the 2000s.

Conclusion

Changes in humor reflect changes in the ecology of scholarship. Sometimes these jokes embrace vulgarity. The same year that WMSCI accepted the SCIgen paper for their conference, David Mazières and Eddie Kohler wrote a paper titled "Get me off Your Fucking Mailing List," [*sic*] which they submitted to WMSCI. The paper consists almost entirely of the sentence, "Get me off your fucking mailing list," repeated many times, including in two illustrative figures that simply restate, "Get me off your fucking mailing list." The paper was not accepted.

Nearly ten years later, "Get me off Your Fucking Mailing List" [*sic*] fared better. After receiving an email invitation to submit to the *International Journal of Advanced Computer Technology*, engineer Peter Vamplew sent the "article as a reply to the spam email without any other message."¹⁵ To his surprise, Vamplew—who was not even listed as an author on the paper—received notice of the paper's acceptance for publication "with minor changes" along with a boilerplate reviewer report and a request for \$150 to be paid to the account of Tej Pal Singh.

In 2013, John Bohannon conducted what he called a “sting operation” by submitting a fatally flawed paper about the “anticancer” properties of a chemical extracted from lichen to *Science*. Bohannon submitted versions of the paper under pseudonyms such as Ocorrafoo Cobange, a biologist at the fictional Wasse Institute of Medicine in Asmara. Of the 304 submissions, 157 of the journals accepted the article, revealing—for Bohannon—the “contours of an emerging Wild West in academic publishing” (2013). In this Wild West, journals take advantage of open-access article processing charges to earn money from scholars overeager, even desperate, to publish. While Bohannon identified “predatory” open-access journals as primarily a problem of the global South (India, in particular), the issue is in fact transnational and widespread. Even journals published by Elsevier, Wolters Kluwer, and Sage accepted the hoax article apparently without carefully reading it.¹⁶

In his essay “The Death of the Author,” Roland Barthes proposed a separation between text and writer. Unlike the author who precedes and nourishes his book, the modern writer or sriptor, Barthes suggested, is “born simultaneously with his text” (1977). The Dada Engine and SCIGen may appear to fit the bill as sriptors in which author and text come into being precisely at the same moment. Yet the paper generators’ creators, who wrote the code, the grammar, and chose the language—creating possibilities for “a testbed of Gameboys,” continue to precede the text. A native English-speaking person coming across phrases like “a testbed of Gameboys” in a standard academic article would laugh and realize that the article was a joke. Yet hundreds, if not thousands, of SCIGen articles have been published. Rather than the death of the author, what SCIGen announces and pokes fun at is, in fact, the death of the reader. These new players of misconduct detection then shift their critiques away from the authorities of the academy and target the criminal, the counterfeit, and the cut-and-paste scientist.

Yet, as we laugh at their jokes, at biologists with names like Ocorrafoo Cobange, at Tej Pal Singh requesting \$150 to publish “Get me off Your Fucking Mailing List,” at readers who do not understand the humor of “a testbed of Gameboys,” do we realize why we are laughing? Are we laughing at nonnative English speakers or scholars from the global South? Does our laughter at spammish scholarship reaffirm the legitimacy and superiority of powerful publishers who can ask for a \$10,000 article processing charge? Laughter judges but offers little analysis, and so we must ask what judgments lie behind our laughter.

Notes

1. It will be interesting to see what cases of misconduct this public model catches compared with the traditional behind-closed-doors model.
2. Hoaxes that target figures of authority continue. For instance, philosophers Philippe Huneman and Anouk Barberousse submitted a hoax article to *Badiou Studies* under the fictitious pseudonym Benedetta Tripodi from the Universitatea Alexandru Ioan Cuza. They explain, “The parody is designed to undermine the foundations on which the ontology of the ‘Master’ rests, its use to determine how social relations work, how radical politics can be based, and, apart from anything else, is highly amusing.” Accessed June 1, 2017. <http://retractionwatch.com/2016/04/07/philosophy-journal-spoofed-retracts-hoax-article/>.
3. As in our Introduction, the term “spammish” points to the new misconduct’s affinities with “spam.” Labels such as “fake” and “predatory” fail to capture the complexity of these new forms of scholarly manipulation.
4. Gabriella Coleman has also written about how humor, jokes, and even funny code figure prominently in hacker discourses (2013).
5. The founder was anonymous for the first three years. Anonymity, which makes some uncomfortable or dismissive, can allow for more honest discussion among scientists. Accessed July 5, 2016. <http://science.sciencemag.org/content/341/6146/606.full>.
6. “PubPeer FAQ.” Accessed July 2, 2016. <https://pubpeer.com/faq>.
7. Watchdogs’ anonymity can anger scholars accused of misconduct, who sometimes sue to unmask, and then sue their critics. Unlike traditional carnival, in which the authorities permit mocking as a way to reestablish hierarchy and status quo, scholars who are mocked may fight back. This lack of permissiveness around mocking might result from the fact that the stakes are different. There can be consequences after the carnival. The status quo is not always reestablished. Scientists can lose their jobs. <http://retractionwatch.com/2015/04/13/lawsuit-involving-pubpeer-unmasks-commenter-as-pseudonymous-whistleblower-clare-francis/>.
8. Science Fraud is archived on the Internet Archive’s “Way Back Machine.”
9. They note that, “all but two of the top thirty are men, which agrees with the general findings of a 2013 paper suggesting that men are more likely to commit fraud.” Accessed July 5, 2016. <http://retractionwatch.com/the-retraction-watch-leaderboard>.
10. They documented their prank with this video. Accessed October 1, 2016. <https://www.youtube.com/watch?v=uT-WOSI2tXg>.
11. “At MIT we created SCIgen, which generates gibberish science papers that continue to fool academic conferences. Ask us anything!” Accessed April 8, 2019. https://www.reddit.com/r/IAMA/comments/3210ym/at_mit_we_created_scigen_which_generates/.
12. “SCIgen - An Automatic CS Paper Generator,” <https://pdos.csail.mit.edu/archive/scigen/>.

13. These quotations are taken from SCIGen's "Ask Me Anything" subreddit. https://www.reddit.com/r/IAmA/comments/3210ym/at_mit_we_created_scigen_which_generates/.
14. Ibid.
15. "Bogus Journal Accepts Profanity Laced Paper," <https://scholarlyoa.com/2014/11/20/bogus-journal-accepts-profanity-laced-anti-spam-paper/>.
16. For a map of Bohannon's experiment in open access, see <http://scim.ag/OA-Sting>.

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Misconduct and Manipulation in Academic Research

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