The Plagiarism Hunter

When one graduate student went to the library, he found copycats — lots of them

By PAULA WASLEY

Athens, Ohio

In a conference room in Ohio University's Vernon R. Alden Library, Thomas A. Mattrka takes just 15 minutes to hit pay dirt.

Scattered before him on a table are 16 chemical-engineering master's theses on "multiphase flow." He examines them in pairs. With a hand on each manuscript, eyes darting back and forth, he quickly scans the pages.

Identical diagrams in two theses from 1997 and 1998 strike him as suspicious. Turning a few more pages, he confirms what he suspected.

"This one needs to be turned in," he says, pointing to an introductory chapter that not only mirrors the structure and content of the earlier one, but also includes whole paragraphs that are virtually identical. "This guy didn't do a literature review," he says. "His literature review was opening this guy's and copying it."

He reaches for another thesis. "Give me time," he says. "I'll find some more."

Over the past two years, ferreting out plagiarism has become Tom Mattrka's hobby, maybe even his obsession. And he's gotten very good at it. So adept, in fact, that the former graduate student at Ohio University — now a project engineer at a nearby explosives factory — has single-handedly blown the lid off a huge plagiarism scandal at his alma mater. Dozens of former students are now caught up in the investigation, several professors have been reprimanded, and the university is wrestling with how one department fostered a culture of academic cheating.

Regardless of whether Mr. Mattrka was driven by revenge or ethics, this much is certain: The scandal would never have erupted without one graduate student's doggedness.

Back to School

Tom Mattrka always wanted to go to graduate school. And, at 37, the timing seemed right. With a decade of work as an engineer under his belt, he had his debts under control. He enrolled in the mechanical-engineering master's program at Ohio University. "I love this stuff," he says. "I really enjoyed being in school." So when in the spring of 2003, about six months into his master's degree, his adviser, M. Khairul Alam, invited the straight-A student to stay on to complete a Ph.D., it was, he says, "almost like a dream come true."
But a year later, the dream soured. Maybe it was because he had turned down a campus job Mr. Alam arranged for him. Maybe it was because he had decided to work with another professor on his Ph.D. research. Or maybe, he says, Mr. Alam just didn't like him. Whatever the reason, Mr. Matrka says, suddenly nothing seemed to please his adviser.

Mr. Matrka submitted several drafts of a thesis proposal — a formality, he thought, since he had already completed his research — and each time his adviser proclaimed it inadequate. To Mr. Matrka, it looked as if Mr. Alam was purposely holding him back while letting other, less-qualified students pass through. "He was holding me to a different standard," says Mr. Matrka. (Mr. Alam declined to comment for this article.)

Mr. Matrka sought the advice of the university ombudsman, who suggested that looking at completed theses might give Mr. Matrka a better idea of what Mr. Alam was looking for. So Mr. Matrka went to the library.

With characteristic meticulousness, Mr. Matrka read all the theses on the shelves that related to his topic — the thermal conductivity of carbon panels. He learned about the library's off-site archive and requested a few reports from there that also sounded promising.

It was then that he noticed something strange about one of the theses.

"I'm looking at it," he says now, "and I'm like, wait a minute, I just saw this upstairs the other day."

There were indeed some remarkable similarities. The first 50 pages of a 1999 master's thesis, approved by Mr. Alam, reproduced verbatim the introductory chapters of a thesis completed by another student of Mr. Alam's only a year earlier. "I was shocked," says Mr. Matrka. "I couldn't believe it."

Evidently neither could anyone else. Mr. Matrka took the 1999 thesis as well as a few other, less egregious plagiarism examples to the ombudsman, Elizabeth E. Graham. He notified the university's judiciary director. He brought up his discovery in a meeting with Dennis Irwin, dean of the college of engineering, who joked that chasing plagiarism could land Mr. Matrka in court. He laid his stack of theses on the desk of Jerrel Mitchell, then associate dean for research and graduate studies, and said, "I think you'd be interested in these." Mr. Mitchell's answer, according to Mr. Matrka, was unequivocal. "No, I wouldn't," he said as he handed them back. (Mr. Mitchell confirms that he declined to read them.)

With his complaints unheeded and his hopes of entering the Ph.D. program fading, Mr. Matrka kept digging. Over the next four months, he spent his lunch breaks, sometimes up to 10 hours a week, in the library looking through old theses written for the mechanical-engineering department. Turning up more plagiarism didn't take long, he says. He just looked for items with similar names or topics, and there it was.

Two theses copied pages from textbooks he had on his own bookshelf, he says. Some, including a 2002 thesis that had 14 consecutive pages in common with a 2000 manuscript, even reproduced past theses' typos and misspellings. Two theses, approved one year apart by the same adviser, had 12 identical pages, and identical titles.

One 2003 thesis was a veritable smorgasbord of plagiarism, replicating five pages from a 2002 thesis, nine pages from a textbook on "flow-induced vibration," and five more pages taken from Japanese journal articles.

The more he found, the easier it was to spot. By late November, he had turned up nearly 30 theses, most by international students, that appeared to include plagiarized material.

**Quest for Fairness**
Tom Matrka would seem an unlikely candidate to take on a university. An extra-wholesome version of the mustachioed Brawny Man, with a bashful smile and the broad chest of someone who dabbles in construction, he is almost excessively polite, the type that arrives on the dot and apologizes for keeping you waiting.

But what he lacks in obstreperousness, he makes up for in patience and persistence. He takes pride in long-term projects, such as the house he is building for himself in the woods, or his six-year-long effort to master the guitar by picking out classic rock tunes every night. By comparison, unearthing 300 pages' worth of plagiarism was an easy task. "Some people like to do crossword puzzles or read books," he says. "I like to read the work of OU grads."

Some people at Ohio explain Mr. Matrka's tenacious rooting out of plagiarism as score settling. (In one e-mail message to a faculty member, Mr. Mitchell, the former associate dean, described Mr. Matrka as "some crazy guy" who got frustrated after his adviser wouldn't approve his thesis.) But Mr. Matrka insists there is nothing personal about his obsessive reading habits. He has never met most of the theses' authors, and those that he has met he describes as "nice guys." Instead, he casts his investigation as a quest for "consistency" and fair treatment. The university, he says, held him to a double standard, keeping him back for a year and scuttling his Ph.D. ambitions while turning a blind eye to a pattern of cheating and plagiarism that dates back 20 years. And that, he says, made his blood boil.

"I told everybody, and everybody was just blowing it off," he says.

Over the course of about a year, starting in December 2004, he wrote letters — to the accreditors, to the chairman of the State Board of Regents, to the chairman of the university's Board of Trustees, to the university's president, even to the governor. He sent an e-mail message to a professor whose textbook had been copied. He wrote the dean of the libraries and cornered circulation librarians about the outrage on the shelves. He spoke out against rampant plagiarism before a graduate-student senate meeting. No one seemed to listen.

**One Step Ahead**

With Mr. Matrka pressing so many buttons, it's hard to pinpoint which one eventually forced the university to act. He thinks the letters to the accreditors did it. And no doubt relentless coverage in the campus newspaper helped. Either way, once people began listening, the situation exploded into a public-relations nightmare for the university, leaving administrators scrambling to keep up with Mr. Matrka's discoveries and disclosures. With every visit Mr. Matrka made to the library, the number of cases of suspected plagiarism kept climbing, to the point where even those charged with investigating were unclear how many theses were involved. (According to a March 2006 e-mail message to the dean, the provost encouraged those dealing with press inquiries to "keep it vague.")

At times the student newspaper seemed to know about developments before the administration did. *The Post* began reporting on Mr. Matrka's library discoveries in May 2005. Five months later, in October, Dean Irwin reported being aware of only four or five cases. In an e-mail message sent some months earlier, in July, to the university ombudsman, he wrote, "as far as I know there are no new issues, but if Tom is spending his time in the library comparing old theses, who knows?"

In November 2005, Dean Irwin appointed Jerrel Mitchell to lead an internal investigating committee that included Mr. Matrka's former adviser, Mr. Alam. The ad hoc committee was attacked in newspaper editorials and letters to the editor as incompetent, even before it became widely known that Mr. Alam had advised on some of the plagiarized theses.

Even worse for the university, after that committee had delivered a tepid report that categorized dozens of plagiarized theses by degrees of gravity and recommended that graduates be given nine months to correct their theses, Mr. Matrka and student reporters took four theses with 20 identical pages that the committee had dismissed as unproblematic, went to Google, and quickly discovered that all four
contained material apparently plagiarized from a software manual.

Sensitive to public perception, in February the provost, Kathy A. Krendl, appointed Hubertus L. Bloemer, an emeritus associate professor of geography and former chairman of the university's Faculty Senate, and Gary D. Meyer, assistant vice president for economic and technology development, to independently review 55 theses under suspicion. In a strongly worded report released in May, the two concluded that "rampant and flagrant plagiarism" had occurred over a 20-year period in the mechanical-engineering department, and criticized Dean Irwin's ad hoc committee for not recommending sanctions for faculty members "who either failed to monitor the writing in their advisees' theses or simply ignored academic honesty, integrity, and basically supported academic fraudulence."

In contrast to the earlier committee's findings, Mr. Meyer and Mr. Bloemer placed responsibility for the plagiarism squarely on the shoulders of faculty advisers and called for the dismissal of the chairman of the mechanical-engineering department, Jay Gunasekera, and a second nontenured professor, Bhavin V. Mehta, who, together, had supervised the greatest number of plagiarized theses.

Dean Irwin defends himself strenuously against criticisms that the university dragged its heels. "When we were presented with information, we acted upon it," he says, adding that he often read of Mr. Mattrka's claims in the student paper before possessing any evidence. E-mail messages released by the university indicate that legal concerns and a desire to avoid a campus witch hunt deterred Mr. Irwin from aggressively pursuing Mr. Mattrka's leads. Administrators also worried about being in uncharted territory with their alumni: Colleges have occasionally revoked a degree for reasons of academic dishonesty, but there was no precedent for dealing with such a volume of cases.

Regardless, the scandal has damaged the university's reputation.

It used to be, says Mark M. Mecum, chairman of the Graduate Student Senate, that when he told people he went to Ohio, they said, "Oh, the party school." (Ohio University ranks second in Princeton Review's list of top party schools.) Now he says it's "oh, you go to the plagiarism school."

Mounting a Defense

Vipul Ranatunga is an assistant professor in the department of engineering technology at Miami University, in Ohio, where he has taught since finishing his Ph.D. in 2002 at Ohio University.

In early July, he received an unexpected letter by certified mail. The letter, from Ohio University's legal-affairs department, told him that his 1999 master's thesis, "Analytical Modeling of Axisymmetric Disk Forging," contained plagiarism and that he had two weeks to decide whether he wanted to forfeit his degree, rewrite the plagiarized portions, or request a hearing before a university board to challenge the allegations.

Graduates who wished to rewrite, it said, must admit to plagiarizing, and would work with a new adviser to "resolve the rewrite in a timely manner."

Mr. Ranatunga is one of 37 Ohio engineering graduates to receive such a letter. And, so far, he is one of only two who have chosen to contest the allegations.

What the committees found, in his case at least, is not plagiarism, he says. He argues that those making the charges are not familiar with engineering theses. And, he says, because investigators are relying on evidence provided by Mr. Mattrka, they have missed the page in the fourth chapter of his thesis with a crucial reference that explains why the next twelve pages of text and calculations are nearly identical to ones in a thesis written by another student, Zhizhong Zhou, one year earlier.

What's more, Mr. Zhou is a friend and former colleague. They shared an office in graduate school; Mr. Ranatunga called him "Joe." If he wanted to pull something over on his department, Mr. Ranatunga
could have copied from some less traceable source. "If I'm smart enough to do a master's in engineering," he asks, "why would I be so stupid?"

**Just Sloppiness?**

Until recently, Jay Gunasekera was known chiefly as a respected researcher in the field of metal-forming processes. His colleagues at Ohio University credit him with building the mechanical-engineering department from nothing. He estimates that during his 15 years as department chair he has brought the college more than $6-million in military contracts. In 2003 he was awarded the university's top title of distinguished professor.

But in recent months those accomplishments have all been overshadowed. According to the university's count, he has advised 16 of the students whose theses were found to contain plagiarism, the most of any faculty member. This, he notes, is a fraction of the nearly 100 whom he has advised in his 23-year career at the university. He has already stepped down as department chairman in the wake of the scandal, and may yet face hearings to lose his "distinguished" title and possibly even his tenure. "This has completely ruined me," he says.

Mr. Gunasekera and his lawyer maintain that what Mr. Matrka has unearthed is not plagiarism, but rather some sloppy citation practices. The students may have omitted a few references, forgotten a few brackets or quotation marks. "They should have been more careful," he says, but there was no intent to deceive, and therefore no plagiarism.

More importantly, says Mr. Gunasekera, the responsibility for plagiarism, along with corresponding sanctions, should stop with the student guilty of plagiarizing. "The only person who knows 100 percent that they plagiarized is the person who plagiarizes," he says.

Otherwise, he says, faculty members are left with the impossible task of policing students' every word. "There's a vast amount of literature out there. It's hard for me to know what's taken from where," he says. "It's not that easy to find plagiarism."

The scandal has prompted discussion at Ohio and elsewhere about judging plagiarism. Some academics, like Hajrudin Pasic, a professor in Ohio's mechanical-engineering department, suggest that the standard academic definitions of plagiarism are too broad, particularly when applied to fields like engineering.

Most of the plagiarism found at Ohio, he notes, occurred in introductory chapters describing research methods and reviewing the previous literature in the field, for which there is little expectation of originality. And all but a few cases involved international students who, he says, whether through ignorance, laziness, or cultural misunderstanding, may have either not known correct citation practices or, struggling to write in a foreign language, been tempted to borrow another student's words.

Although he does not condone the errors, Mr. Pasic and his peers draw distinctions between plagiarism in introductory chapters and the far graver sin of plagiarism or fabrication of research results. It would be unfair, he says, to revoke a student's degree for such a minor offense. "For the introductory part [of his thesis], a student spends seven days, and for his research part, a student spends two years," he says. "He or she didn't graduate based on whatever he wrote in the introduction."

Mr. Irwin, the dean, and Ms. Krendl, the provost, express little tolerance for such distinctions. Although both emphasize that the plagiarized theses vary greatly in terms of their severity, plagiarism is plagiarism, no matter where it occurs, they say. And the university intends to deal harshly with plagiarists. "It's not acceptable. Period," says Mr. Irwin.

**New Procedures**

The university is eager to move beyond the scandal rather than harping on the errors of the past.
Thirty-nine compromised theses have already been removed from the library, and administrators hope that the graduates called to rewrite or defend them will do so quickly. Students are now required to submit theses electronically and sign a statement of originality. At the advice of an outside expert, the university is considering an honor code and the creation of a student-led academic-honesty advisory committee.

Administrators at Ohio believe that the problem of systemic, unchecked plagiarism is unique to the mechanical-engineering department. That conclusion is supported by a survey by Hugh Bloemer and Gary Meyer, who checked 65 theses from 13 other disciplines, finding no similar replications of material. The pattern suggests, says Mr. Irwin, that even within mechanical engineering, "there was a subculture associated with a small number of faculty members that, while it might not have actively encouraged plagiarism, did not rigorously attempt to prevent it." Accordingly, some sanctions have already been meted out to faculty advisers. For instance, Bhavin Mehta, who was found to have advised 11 plagiarized theses, will not be permitted to advise graduate students in the one year remaining on his contract.

Mr. Matrka graduated with his master's degree in 2005, and decided to get a job rather than stick around for a Ph.D. For his part, he says he will not be satisfied until the university sets the record straight. After all, he says, it is the integrity of his degree that is at stake. (His request, a hefty one, is that the university examine all past engineering theses for plagiarism. Otherwise, he says, it "almost seems unfair to the plagiarists.") In the meantime, he might consider some more recreational reading of theses. And when the plagiarizing graduates come back with corrected copies, you better believe he'll be reading those too, he says.

He may not be the only one.

In late June, only a few weeks after the Bloemer and Meyer report called for Mr. Gunasekera's dismissal, Mr. Matrka ran into the professor at the Athens Kinko's, making photocopies.

"He was very nice," says Mr. Matrka. They chatted, and Mr. Matrka offered his sympathy, agreeing that the university needed to be consistent in dealing with any plagiarism in the mechanical-engineering department. When "Dr. Jay" left, the stray pages left behind at the photocopier looked curiously like excerpts from civil-engineering theses.

Mr. Gunasekera, who has filed a grievance against the university for publicly releasing the Bloemer and Meyer report without first giving him the opportunity to defend himself, won't comment on whether he is taking up the hunt for plagiarism where Tom Matrka left off. What he will say, however, is that "at any university, at any department, I think you would find the same."

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