

A Novel Approach to Accounting

The Case of the Purloined Pagoda

There's a new trend afoot—using fiction to teach accounting.

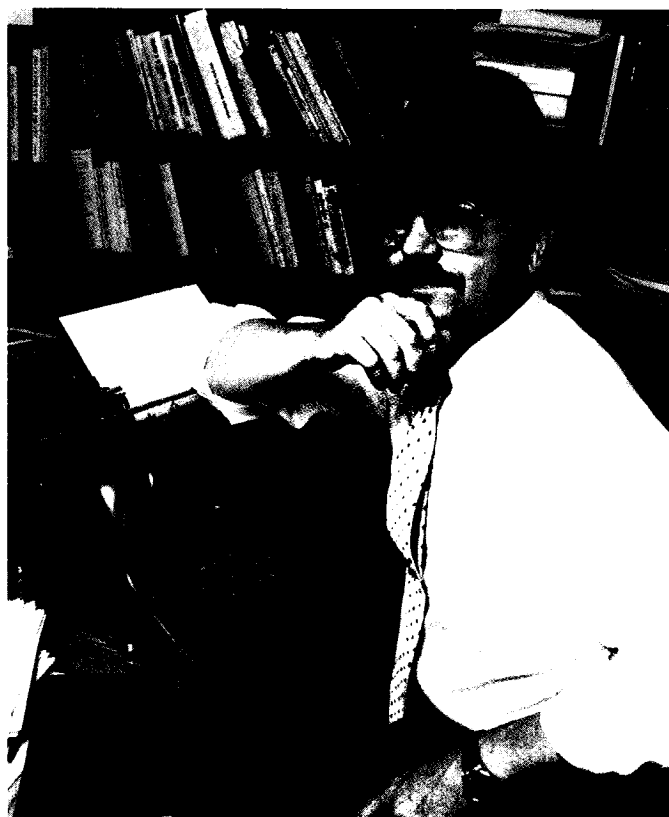
BY KATHY WILLIAMS

When Fred Brown made out the list of supplies he'd need in Bangkok and Chiang Mai, he didn't include a pistol. "As a safety precaution he had packed his brown polymer pistol in his suitcase. It had a ceramic barrel insert and six springs—the only metallic parts. The remainder of the pistol was made of plastic. It would escape detection from most security detection machines, but Fred had decided not to carry it on his person."

He was all set for his part in the daring assault on the magnificent Shwedagon Pagoda, the most spectacular attraction in Rangoon, Burma. Appearing to rise dramatically from a large lake, the pagoda contained 13,153 foot-square plates of gold, 5,451 diamonds weighing 2,078 carats, and 1,383 rubies, sapphires, and topaz. At the top was the crown jewel—a single 76-carat diamond.

No, this passage isn't from the latest Robert Ludlum thriller—it's from a textbook novel that teaches basic accounting principles. Written by Texas A&M Professor D. Larry Crumbley to be used at the end of a beginning accounting course or at the beginning of an intermediate one, the book, titled *Accosting the Golden Spire*, exemplifies a relatively new educational technique—using a novel to teach complicated technical material.

The trend started in 1978 with *Murder at the Margin*, a murder mystery written by two economics professors and published by Thomas Horton and Daughters, a small college textbook publisher in Sun Lakes, Arizona. The hero used economic theories to solve a series of puzzling murders. "To my knowledge, it was the first novel to be used in the classroom specifically," Ann Horton says. Although the manuscript had been submitted as a regular trade novel, the Hortons decided it could be used better in the classroom. "At first we were a little concerned because it *was* a novel—and also a novel idea, if you will—but when we were convinced that it could be used as a teaching tool in an economics course, we decided to try it. It just seemed like a good idea at the time. Besides, the beginning courses in economics appeared to need a little something to liven them up," Mrs. Horton explains. "Apparently *Murder at the Margin* did that. It was an immediate hit with professors of economics, they shared their enthusiasm with others, and it just took off." The novel has been adopted as a supplemental textbook on



Author D. Larry Crumbley

more than 400 college campuses throughout the United States and has sold more than 50,000 copies.

It was so successful, in fact, that Horton published a second novel in 1985, *Death on Demand*, which also has been a big seller. In 1985 the MIT press published the original professors' second book, *The Fatal Equilibrium*. A fourth economics mystery, *In the Long Run We Are All Dead*, was published by St. Martins Press in 1984.

NOT FOR STUDENTS ONLY

The biggest seller, however, isn't a classroom novel—it's a management novel designed to wake up American businesses (especially manufacturers) and make them more competitive in the global marketplace, stressing manufacturing excellence and introducing OPT (optimized production technology) systems in a novel format. It describes the trials and tribulations of Alex Rogo, a plant manager who is falling farther and farther behind in meeting customer deliveries, as he is introduced to the latest manufacturing production control and inventory techniques and later is promoted to division manager because of his

Dartmouth, and Stanford University and several other colleges have been ordering large quantities. Mr. Gadd says *The Goal's* sales are even better than the company expected with about a third being ordered by graduate schools and universities, a third by businesses, and a third being sold in bookstores.

North River's next endeavor in this genre is *The Challenge*, a novel about an accountant who is in line to become CEO and who is sent out to run a plant in order to prove himself worthy of the job (see sidebar). Published in late September, it already is selling well. In fact, North River had 5,000 advance orders for it. Although North River has published only two "teaching" novels, it has several others in the

Both Larry Gadd and Ann Horton believe the trend is here to stay. "Although it took a long time for other publishers to feel that this was a reliable endeavor—using mystery novels as a textbook—others have been published now," Mrs. Horton notes. "We have seen quite a few unusual proposals in the last few months, some of which are slightly offbeat. For example, someone sent us an idea for a novel aimed at mental health professionals. It was supposed to help them sharpen their treatment and diagnosis skills. Another was a proposal for a play in which three allegedly insane economists are in an insane asylum. . . but neither of those was accepted."

Horton's most successful book, she says, is a 1974 text, now in its seventh edition, called *Accounting: The Language of Business*. Although it isn't a novel, it isn't a plain textbook either. Half the book is a glossary, and half explains how financial statements should be interpreted, giving a case in which two companies present the same material in two different ways, leading to two different interpretations of the companies' solidity. It has been in the packet of texts given each new Harvard MBA student every year since its publication.



Dave McDermann

A professor's inspirational props.

outstanding improvements in the plants. Written by Elihyu M. Goldratt and Jeff Cox, *The Goal* has sold more than 300,000 copies since it was published in 1984 by North River Press in Croton-on-Hudson, New York.

Publisher Larry Gadd says the book was the first of its kind for North River, but the company instinctively knew it would do well. "The trick to this kind of book is getting the right author, not the right author who can write fiction, but the right author who has a new and innovative approach to the subject matter. We thought this one did." Four years later, the book has been adopted by the Harvard Business School and Amos Tuck at

works.

Larry Gadd says the novel approach has caught on because people find it easier to learn when they can identify with characters. "It's also easier to use fictional characters than true-to-life characters because you can put every possibility into one story. You can pretend that events that happen to several different people in several different companies happen to one person. You also can give more examples and actual scenarios that people can identify with. This really isn't a unique learning tool because language is or used to be learned through reading novels. But it puts a little fun into learning something."

THE PLOT THICKENS

Larry Crumbley's first effort was a novel called *The Ultimate Rip-off: A Taxing Tale* that combines fraud, crime, politics, and taxation in a suspense thriller that teaches principles of taxation and describes the inner workings of the Internal Revenue Service. Its hero is IRS Special Agent Jeff Burke, who is assigned to find several taxpayers who are evading taxes and bring them in. During his search he survives several attacks on his life and uncovers an illegal gambling ring, a money laundering scheme involving a chain of retail coin stores, and a neutron bomb conspiracy.

Blended in with the action are lessons. For example, when the IRS suspected a psychic of hiding some of his income, it called him in for an audit. After asking the man a series of questions that left him sweating, the agent switched to a friendlier tactic. Suddenly the dra-

ma shifted to teaching: "Agents are instructed to establish a rapport with the taxpayer and his representative and in a friendly, affable manner to establish the confidence of the taxpayer. . . . The friendly approach gives the taxpayer a false sense of security and the agent may be able to get information that would not otherwise be revealed. Form 4822 is used by an agent to record the information gathered during the interview."

Dr. Crumbley uses the book in his taxation courses as a supplement to the regular material. During the last two weeks of the semester he hands out the book and asks the students to read it, mark the tax passages in yellow, and enjoy the rest. Then he puts about 25 questions from the material covered in the book on the final exam. Now the students know he is the author, but when he wrote *The Ultimate Rip-off*, he used the pseudonym Iris Weil Collett (read it aloud slowly, with a Southern drawl), so the first group that read it thought the book was written by Ms. Collett. He had that class do a book report and offer critiques.

The response was rewarding. One student said the book was "fantastic because it has a very good approach to learning about taxes and the operations of the IRS to catch tax evaders. It relates the facts of the tax law to the reader by using incidents with actual people, which is certainly much better than memorizing the law all by itself without example." Another added, "The tax lessons are painlessly tied into the plot, providing a unique approach to learning taxation. This type of educational novel has great potential and should be expanded to other reader markets."

Professors also complimented it. "It achieves its purposes—it teaches and it entertains." "Once I started reading it, I had trouble putting the book down. I believe students will find it interesting, informative, and enjoyable." Although the book was published just this year—February 1988—already some professors are using it in their classrooms, and Florida A&M, Florida State, and Northern Arizona universities have adopted it. "Others have inquired about it, but I really haven't kept track of the various places because it hasn't been in

ROMANCE JUST-IN-TIME

Once upon a time two men came up with a great idea: Why not teach techniques of an effective manufacturing system in a way that's—gasp!—interesting to read? Perhaps, they reasoned, by combining fact with fiction they could make people eager to flip to the next page instead of trudging through it.

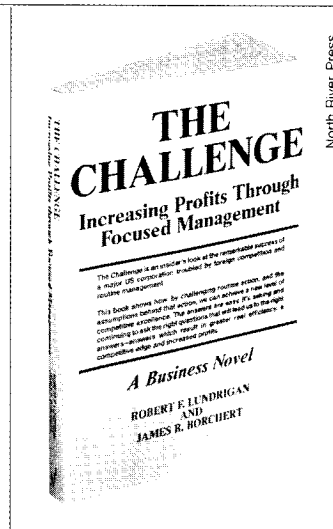
So the two men, Robert Lundrigan and James Borchert, two manufacturing experts themselves, sat down to write a business novel. This novel, called *The Challenge*, is one of several new books of its type (see feature story), a sly trick current authors have used to lure readers into grasping key points of technical subjects without nodding off between pages.

If this idea sounds familiar to you, it should. It was popularized by Eli Goldratt's *The Goal*, published in 1984 by North River Press, the same company that published *The Challenge*.

The novel stars Larry Jones, a 30-year-old accountant who finds himself competing for the position of CEO of a major manufacturing organization. In order to prove himself worthy, he has to run one of the company's plants successfully for a year. In undertaking this task, he learns a lot about setting up and scheduling a factory floor, motivating workers, initiating changes, and dealing with labor-management issues. Of course, the real story is that the reader learns all this, too.

Human interest? There's plenty for readers, except maybe the most ardent Harlequin Romance fans. Larry makes a lot of friends in this plant and even falls in love—with the boss's daughter, no less. But the authors stay focused on their primary mission, describing daily en-

print long," Larry Crumbley says. Ann Horton notes that the book is in its second printing (3,000 copies



counters with batches, climbing inventory, allocating overtime, and factory check points. They cleverly sugarcoat the facts with fast-paced dialogue, breaking up the "lectures" with characters asking questions or making comments, just to keep the reader alert during long pedantic passages.

Larry's greatest asset probably is that he's not afraid

to change. When a clever Harvard grad student—and Larry's girlfriend-to-be—suggests innovative ways to improve productivity at the plant, he listens—even when it means going against systems he's believed in all his life, like his cherished checkpoint system. His ability to accept new ideas may be what eventually lands him the job of CEO. But if you want to find out if he gets the girl, you'll have to read the book.

Robert Lundrigan retired in 1987 from General Electric where he was manager of master scheduling and inventory control. James Borchert is president of ProfitFlow Management Corp. and has implemented concepts described in *The Challenge* in corporations such as General Electric, Northern Telecom, and the Packaging Corp. of America. The authors' combined writing effort is an attempt to help America compete with international manufacturers by demonstrating synchronized manufacturing and the Japanese technique of JIT manufacturing. According to Lundrigan and Borchert, *The Challenge* is their way of "asking and continuing to ask the right questions that will lead the reader to the right answers—answers that will result in greater productivity, a tremendous competitive edge, and substantially increased profits."

Robin Bardell

the first run and 3,000 copies now) and that they are pleased with the results.

REACH FOR THE GOLD

Last month Dr. Crumbley's second teaching novel hit the bookstores. *Accosting the Golden Spire*, also published by Thomas Horton and Daughters and quoted at the beginning of this article, teaches basic accounting principles while weaving an intricate plot of international intrigue involving sleazy financial consultants, jade merchants, hit men, and con artists who plot to steal treasures from a foreign government. Its hero is Lenny Cramer, a mild-mannered professor at Wharton's School of Finance and a forensic accountant who testifies before Congress and appears as an expert witness in a court battle. While he and his daughter are on a tour of Burma, he becomes enchanted by another tour member, a beautiful jeweler named Dana Scott, who also is from Philadelphia. After they return to the United States, Lenny calls Dana, stops by her shop to visit, and becomes involved in checking her books because she believes her partner is stealing from their business. Thefts, murders, and a host of underground dealings follow.

As the subplots unfold, so do the accounting precepts. For example, a restaurant owner has just been awakened by the police who tell him his establishment may have been burglarized because its front window has been broken and that he should get down there immediately. "As Mellini got into his car he thought how glad he was that he had listened to his accountant's advice and signed a contract with the security company.

"The cost of having a good security system is an operating expense just like the salaries expense you have for your employees, the cost of utilities, the depreciation deduction on your kitchen appliances and dining room tables, and the amortization of your food and liquor licenses," his accountant had told him."

Dr. Crumbley tested last semester's class on the novel while it was still in the draft stage and again received good reviews. He also has introduced a chemistry novel this semester about a female chemistry student who is working on her dissertation when her major professor sends her out to house-sit in Cali-

Using the novel in the classroom first gives me a better product.

ifornia. It turns out that some people are using this area to manufacture drugs, and she gets involved in trying to stop them, and, in the process, gets locked up a few times, Dr. Crumbley explains. "She still works on her dissertation the whole time," he laughs, "and we get across a lot of chemistry. This one is called *The Chemistry of Whispering Caves*, but I haven't sent it to a publisher yet. Normally what I do is take the novel and use it in the classroom first. It helps me get a better product."

MOVE OVER, ARTHUR HAILEY

Although Larry Crumbley thoroughly enjoys teaching and accounting, his passion is writing. "Writing is my strong suit. I've written all my life," he says. "I have written about 25 books now and well over 300 articles. Many are business, tax, and accounting articles, but I have written for almost all types of publications. I've even written for coin magazines, stamp magazines, and diamond magazines." In addition, he is a handbook editor for John Wiley & Sons and Dow Jones-Irwin, and he is editor of *The Oil and Gas Tax Quarterly*.

Wanting to try his hand at fiction, in 1978 he wrote *The Ultimate Rip-off* "just as a novel. You know, we all think we have that one great novel in us," he says. He sent it to several publishers, but it was rejected, so he filed it away. Then three or four years ago at a conference he ran into Thomas Horton, one of the publishers who had rejected his manuscript. Mr. Horton remembered Dr. Crumbley's book and suggested that the author re-submit it because the economics novels were selling well. When Larry retrieved his manuscript from his files, he decided it was too weak, so he strengthened the plot and added more tax material.

A fan of Arthur Hailey—author of *Hotel*, *Wheels*, and other best-sellers and master of intricate plot layers—Dr. Crumbley patterned his novel in the same macro approach. "I like macro approaches better than a straight-out murder mystery, or micro approach," he says. "That's just my personal preference. The four economics novels are murder mysteries, but I decided to do something different. I like the broad, gigantic plots rather than just a simple murder. The spy novel suited me because I wanted the reader to keep turning the page."

At the same time he introduced his novel in his classroom, he began conducting research on the best way to teach and found that several other professors agreed with his theory that the novel approach—or scenario principle—was the answer. "Readers restructure what they read into a human agent who is performing actions in a particular situation—an example, in other words. Once we develop our example, we can understand difficult concepts. That is just how we operate throughout life. So, the way to teach complicated material, whether it is cost accounting, taxation accounting, or anything else, is to have a lot of examples," he explains.

The novel approach is an extension of the scenario principle, he notes, because a novel can be a series of continuous examples relating to a theme instead of just several unrelated examples put forth as separate scenarios. In addition, students tend to relate to fictional characters in action-packed adventures. They are so accustomed to television and movies that this video generation needs mental stimulation and verbal pictures to jog their memories rather than gray pages of technical material alone. "The novel approach is an excellent substitution for a dull practice set and is a flexible teaching tool to overcome boredom in the classroom. The concepts and attitudes a novel teaches last long after the facts are gone," Dr. Crumbley emphasizes.

Although the concept sounds similar to the case study approach practiced at Harvard Business School and others, Dr. Crumbley says it isn't the same. "Quite often in the case study approach you are not given solutions, so you have to

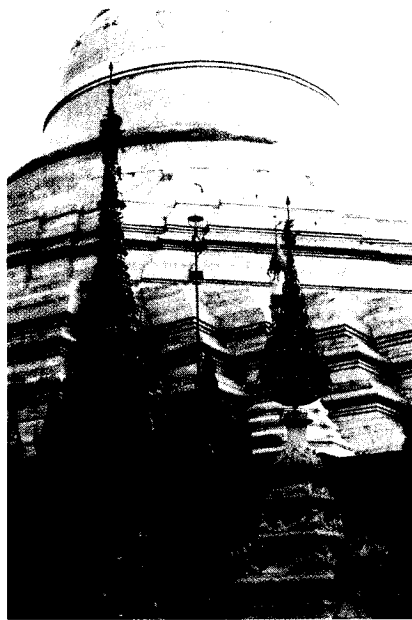
come up with the solution yourself. In general, the best way to teach is to have both the facts plus the solution. Break the material down and give the students everything because a person may come up with the wrong solution when he is examining the facts."

TESTING HIS THEORIES

Now he wants to expand his research by conducting experiments in his own classroom to see whether and how much students *really* learn from novels. Although his students have told him they enjoy his (or Ms. Collett's) writings, and he has seen improved results on the novel portion of his final exams, he still wants more concrete proof. First, he wants to determine if teaching from a supplemental novel increases students' knowledge of the subject as well as their overall literature background. Second, he wants to investigate whether reading a supplemental novel will increase the students' positive perspective of the accounting profession. "In other words, does the student have a higher regard for a tax position or other accounting position after reading an entertaining and innovative novel about accounting life? If so, more students may select accounting as their career path," Dr. Crumbley notes.

Third, he wants to assess the improvement of the students' ethical standards and ethical awareness. "As you know, accountants have a few ethics problems right now, so students need to learn about ethical dilemmas as early as possible," he says. Fourth, he wants to find out if, because a novel is entertaining, students might give a more positive evaluation of the instructor on student evaluation forms, something that has become more important in the classroom today.

He wants to conduct his research in two to four tax classes over two semesters, assigning half the students to read *The Ultimate Rip-off* as an independent study and half to read regular technical articles on the tax profession and on ethics. As he explains, "During the first semester, the early class will be assigned to read the novel, but during the second semester the early class shall read the nonaesthetic material. At the beginning of each semes-



The Shwedagon Pagoda

Larry Crumbley

ter, all classes will be given a short questionnaire to determine their impression of the tax profession and their ethical standards. The same questionnaire will be administered at the end of the semester." He then will compare the classes' performance both semesters in light of the four hypotheses being tested. That way, he says, he will be able to determine better ways to inform students about tax concepts, practice and procedure, and policy, and other professors will be able to follow suit.

Meanwhile, he's going to keep churning out his novels between classes. Right now it takes him about six weeks to write his first draft, and he prefers to write at home, long into the night, because he can work uninterrupted. "My wife, Donna, accuses me of working all the time. She tells me I'm a workaholic—and I guess I am," Larry Crumbley laughs. He never runs out of plots, either. "You can be thinking of plots when you are driving home or when you are out jogging or when you are on vacation. Even when you are doing things that you would consider wasting time, you can come up with some good ideas." In fact, it was on a trip to Burma that he came up with the plot for *Accosting the Golden Spire*. "The minute I saw that pagoda, which is supposed to contain more gold than Fort Knox does, I knew what my next plot would be."

The only problem he has, he sighs, is an overabundance of ideas. "I have more plots than I have time to write. I've got a fantastic one involving an auditing book I'm working on. It involves Poland, Coca Cola, and international dealings. I'm also working on a government novel. I've just finished two more manuscripts that are ready to be sent to a publisher. The one for a basic tax course is called *Tax Sleuths*. It involves a CPA in Chicago and a forensic accounting professor from Ohio University who are trying to solve a murder. The other one is called *The Deadly Art Puzzle—Accounting for Murder*, which is a murder mystery involving a CPA turned art dealer. Now the trick is getting them in print."

He swears he doesn't base his characters on anyone he knows, and he says the fact that his wife is an IRS agent had nothing to do with *The Ultimate Rip-off*. "I wrote that in 1978 before my wife became an agent. She's been an agent for only eight years," he says. His favorite heroes now are forensic accountants—"people who look at the records. They don't necessarily make the records, but they try to use the records. That's important."

COMPLETING THE MISSION

He wants to branch out from accounting now, and his long-term goal is to write a teaching novel in every area of business. Although he's writing constantly, he hasn't started making any money yet from this endeavor. "I don't know if I ever will make any money from this occupation. In my heart, I really doubt it. Right now I see it more as a mission. It's very difficult to change teaching methods and to change the way professors think and act. I like doing the novels, the students like reading the novels, and I think this is the way to teach. Now I have to convince others. It's not often that you get an idea and you can follow through with it, but I'm going to try." He pauses and grins. "Besides, one day I think you'll see some of my plots on TV." ■

Thomas Horton and Daughters is located at 26662 South New Town Drive, Sun Lakes, Arizona 85248. North River Press is at P.O. Box 241, Croton-on-Hudson, NY 10520.