



Writing books at the push of a button

INSEAD professor Phil Parker has been granted a US patent for his software programme that writes books. It took him seven years to get the patent, and while the registered patent name is decidedly scholastic: Method and Apparatus for Automated Authoring and Marketing, the implications for the information age are not. It's not 'creative intelligence.' It's 'reverse engineering' – deconstructing books into 'genres' and then writing software programmes to fit those genres.

What is a genre? Look for a well-defined formula. Parker uses TV game shows as an example. “If you look at game shows, they’re very formulaic. You always have to have two alternatives or three alternatives to the answer. One of them is typically obviously wrong and there are usually two that are fairly close. So the computer, using a typical algorithm that a human could, finds another answer that is close, but not too close.” The method is universally applicable, says Parker: “You look at what is the end genre, what the commonalities are and then you start right from the beginning to make sure you can produce that variance in an automated way.”

“It does mimic the human mind,” says Parker, who holds the INSEAD chair in Management Science. “But for a particular genre, not all of the human mind is actually used,” says Parker. “It’s rare that you hear or read an economist using adjectives, for example. Because I started in the publishing industry, I knew all of the repetitive tasks that were done for a given genre, and I said to myself a lot of those things could actually be programmed into a computer directly and could be applied to a data series. There’s not that much computer code.”

The software programme imitates or does very similar activities that a normal author would. It takes the tedium out of writing, but it doesn’t write all types of books. It does however, cater to arcane tastes and creates economies of scale with just one book: expensive information in a book that is ridiculously cheap to produce.

“It writes certain, very particular types of books,” says Parker. “Mostly high-end business reports, like international benchmark studies ... things that a CFO (chief financial officer) for example would hire a PricewaterhouseCoopers to do: a global benchmark study, where you’re comparing multinational firms’ balance sheets and income statements, the problem being of course that companies across different economies have different accounting standards.”

It would take high-end accountants and lawyers months to compete such studies. Parker’s software does in 30 minutes or less, at a very low cost. “The average cost of a title may be 12 (US) cents ... 12 cents to 50 cents per title,” he points out. “India could not compete against this business model. It renders the cost of producing within the genre at its literal minimum level. It probably couldn’t go any

lower unless I moved to a country that had free electricity.”

Indeed, as Parker gave INSEAD Knowledge a demonstration of the software programme’s potential by generating a 250-page report on 'The Market for TV Business Reports in the World' in less than 15-minutes, using just one line of data from the Wall Street Journal on the amount spent on business reports in the US last year. The report covered every single country and capital city in the world. “It would be larger and more helpful if we’d input more data,” Parker apologised.

His books and reports are for a very specific audience – the client list includes government agencies, international banking firms, as well as multinational companies. There is no marketing department. Even that is done by computer. “The computers will do the distribution, post the Google ad campaign and they do all that in an animated fashion,” he says.

Book storage takes a few gigabytes. There is no inventory: you won’t find hard copies of Parker’s titles in a bookstore or on library shelves, but you will find them online. So far Parker’s ICON publishing group has more than 250,000 titles in ‘cyber’ print. A Google search will find them; you then go to Amazon.com to buy the book and it’s printed on demand.

“You’ll click on an Amazon button when you buy it, an electronic signal is sent to somewhere in Tennessee, the book is then printed, it’s put into paperback format, put into an envelope and shipped directly to the customer,” Parker says.

Parker uses this software to indulge in his passion for dictionaries. He owns the name 'Webster’s Online Dictionary' and believes that with more than 30 million entries, it is the world’s largest dictionary. “It covers 600 languages,” he says, “and that’s only the beginning.”

Parker came up with the idea for book writing software around 1992, while doing publishing in the mobile communications industry. “I thought, ‘what’s really different between marketing for telecommunications and toothpaste? Or telecommunications and potato chips? If we could do a marketing survey for one industry, why not do it for all?’” The challenge was to come up with a methodology that would render a high-end industry study in 30 minutes. He did it with some personal savings, as well as some support from INSEAD.

“INSEAD is a very entrepreneurial place and the deans are very open to new ideas. INSEAD gives you virtually 100 per cent academic freedom ... they’re willing to risk faculty time on really new

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things that may or may not be applicable to academic journals,” says Parker.

INSEAD is also helping with the next step in Parker's project: bringing books and his management lectures to life as animation on internet video. "INSEAD was nice enough to finance a motion-capture suit for me," says Parker. "So I play a lecturing salamander in a 3-D amphitheatre."

The project today is self-financing: sales of annual subscriptions or individual books and reports for as much as \$700 each cover expenses, paving the way for growth rates of up to ten per cent a year. With patent in hand, Parker is now looking to the future. “I’ve talked with very large-scale entertainment companies, and they’re very excited but are not sure how to get their hands around it. I want to maximise the impact of this approach, not hide it; but I’m not looking to sell the company.”

Parker does see the number of available titles increasing to 800,000, with more than 200,000 video clips. But he’s not looking to replace authors of fiction – even best-selling fiction. “I would never try to programme a computer that would write the Harry Potter series,” he says. “The amount of time needed to write a programme would be longer than the human writing the book.”

Phil Parker teaches in the following Executive Education programmes:

[Business Strategy for HR Leaders](#)

[Telecommunications Strategy and Marketing](#)

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