THE TROUBLE WITH TEXTBOOKS IS THE MONETIZATION OF SCIENCE

M. D. Rutherford

Department of Psychology, Neuroscience & Behaviour, McMaster University, Hamilton, Canada

rutherm@mcmaster.ca

The New York Times recently published an exposé, revealing that two versions of the same US History textbook differ in different parts of the country. In a California classroom, the book explains that the Second Amendment, articulating "the right of the people to keep and bear Arms", allows for some regulation of gun sales. The same textbook found in a Texas classroom has a blank space where that annotation would appear. Both versions describe the literature that African American authors produced during the Harlem Renaissance, but only students in Texas read that some critics "dismissed the quality of the literature." The Texas textbook celebrates entrepreneurs and the industries they created, but only the California textbook adds a description of "The pollution they belched into the atmosphere" (Goldstein, 2020). Why does the academic record differ across geographic regions? In order to maximize sales. One version of the story is more palatable in California, while another version will sell in Texas. This phenomenon is not unique to the United States, nor to any specific academic area: A recent analysis of English as a Foreign Language textbooks written for Turks and Persians concluded that coverage of gender, poverty, slavery and racism varied dramatically depending on the intended audience. The authors characterized such topics as "too risky" (Ulum, Köksal, 2019).

The textbook industry is a commercial enterprise. Textbook publishers are businesses, and the function of any business is to make money. The job of an acquisitions editor is to find new books that will do well in the market, and to coax new editions out of authors who have written books that sell. Textbook prices have been increasing steadily, following an early dramatic increase in the 1970s when textbook publishers

started including much more art, printing books in color, and charging for these graphics. A subsequent study compared student learning from textbooks published in the 1960s and those published in the 1980s after a more the three-fold increase in illustrations. Student comprehension was the same in the two groups (Smith & Elifson, 1985). Between 1977 and 2015, textbook prices increased 1041%. Students have no choice about which textbook to buy (it is selected by the instructor) so for a while, business was very profitable.

Is it possible to publish quality textbooks in this milieu? The essence of the scientific method is that predictions are falsified. As a result of data collection, we learn that some theories are wrong. Some theories stand up to decades of new data, some are unable to survive new findings. Even beyond science, academics seek to frame observations with models that will still fit the data as new findings are discovered. Sometimes, theories are refuted, which ultimately is a desirable part of the process: we create newer, better, more nuanced theories when the old ones fall to new findings. But publishers want to sell books. They fear that if a textbook critiques a theory, any instructors who espouse that theory will be alienated and sales will suffer. As a result, when textbooks introduce two or more incompatible theories the chapter likely concludes with "they are all partly correct".

I wrote a Developmental Psychology textbook that was published and sold well in its first edition. Two years later, the publisher contacted me to say that the sales were sufficient to warrant a second edition. I signed a contract for the second edition and within weeks I had a setup letter and a plan to move forward with revisions.

Unfortunately, the new acquisition editor, not the same person I worked with for the first edition, was not a psychologist. He wasn't even a scientist. He had a degree in business. He was not able to deeply engage in my treatment of theoretical perspectives. Rather, his focus was on not alienating anyone who might adopt the textbook.

In my developmental psychology textbook, I introduce 4 perspectives. I clearly favor one of the 4 perspectives: Evolutionary Psychology, and that was my intention when I wrote the book. I describe the associationist perspective as a foil and explain that if an experiment isn't designed to falsify an associationist account, richer inferences aren't warranted. Two other perspectives (including a Piagetian perspective) are offered for historical and contextual completeness. The acquisition editor did not and could not understand that these theoretical perspectives served different roles in the book. Instead, he imagined that there were equal numbers of instructors out there favoring each one, and since we must not offend any potential customers, all of these perspectives had to be correct.

Over the next two years we went through two rounds of reviews and edits. We struggled. He insisted that the four theoretical perspectives receive "equal treatment". We discussed what that meant: did each perspective need the same number of words? He wanted each perspective to be equally supported and equally critiqued. I worked to satisfy his requests, but I resisted scientific falsehood. In the end our negotiations broke down. Finally, the publisher released me from our contract. If he hadn't, I would have been unable to move forward with my textbook since the contract left the publisher with the copyright.

So, how do you introduce students to our field despite an inability to publish textbooks that reflect the current understanding of the field? There are solutions.

First, you can always teach your course without a textbook. I know a lot of instructors who take this approach, especially for upper year courses. This, of course, involves gathering your own materials and assembling your own reading assignments. It is more work than teaching from a textbook but can be effective for more experienced instructors or those with a great deal of expertise in the field. It is risky for instructors who are less familiar with the field because they might skip topics that are considered a fundamental part of an undergraduate's education.

Second, you could adopt one of these "we can all be right" textbooks, but then debunk it in class. You could follow the textbook to ensure that students have broad exposure to the topics that are important in the field, but then use class time to make it clear to students that not all of the theories covered in the book are equally capable of accounting for observations. You might introduce supporting evidence from other sources.

I chose a third option. I now publish my textbook myself, and I recently released the fourth edition. I have found that there are several advantages to controlling the review process and publishing the book myself.

- Most importantly, I can get the science right. I don't have to avoid describing empirical work that challenges a particular theory, fearful that someone who holds this theory dear will not adopt my book. I don't have to end each chapter with "All of these theories are a little bit correct." I can describe how science progresses.
- By controlling the review process, I can target people who have the expertise I am looking for, and I can ask for the information I want in order to improve the book. Feedback is, obviously, more valuable if it comes from instructors who are more likely to use the book. And I can ask my preferred reviewers the questions I am most interested in. I ask whether the research is up to date, whether I mischaracterize any research, and whether the book's organization make sense. Publishers have different priorities. My previous publisher asked whether I had treated all of the theories equally. And of course, "Are you likely to adopt this book for your course?"
- Since I control the distribution of my textbook, I know who is using it.
- Publishers are expensive: they generally want 80 to 85% of all book sales. Since I am not accountable to a commercial textbook publisher, I can make my books free to instructors (and their students) when they agree to give me some feedback on the book after they use it. Just as open access journals make research more widely available, cutting the cost of publication can make textbooks more widely available. I find that many instructors are happy to relieve their students of the cost of a commercial textbook.

There are a lot of benefits to taking control of textbook content, but in my mind, the most fundamental is that the current state of the field can be conveyed to students. Students should not be sheltered from the demise of some theories so that textbook sales can be maximized.

REFERENCES

- Goldstein, D. (Jan 12, 2020). Two American Stories. *The New York Times*. https://www.nytimes.com/interactive/2020/01/12/us/texas-vs-california-history-textbooks.html
- Smith, B., & Elifson, J. M. (1985). Do Pictures Make a Difference in College Textbooks? College Reading and Learning Assistance Technical Report 85-02. https://scholarworks.wmich.edu/reading horizons/vol26/iss4/10/
- Ulum, Ö. G., & Köksal, D. (2019). Ideological and Hegemonic Practices in Global and Local EFL Textbooks Written for Turks and Persians. *Acta Educationis Generalis*, 9(3), 66-88.