

## THE “LADY” HAS A NAME: TEACHING HISTORY OF STATISTICS USING SALSBURG WITH CORRECTIONS

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### INTRODUCTION

The historical background of statistical methodology is important and can be an effective way to pique student interest. The authors have used David Salsburg’s *The Lady Tasting Tea* (2001) in a History of Statistics discussion course (STA 430) and an Honors College section of Introductory Applied Statistics (STA 215). STA 430 is a one credit hour elective course taken by Statistics majors and minors and has been offered once a year since 2005. STA 215 Honors includes a history component, and requires a research paper. *The Lady Tasting Tea* tells the story of how today’s modern statistical methods came to be, often focusing on the virtues and character flaws of those responsible, covering men and women from many countries, including Great Britain, India, Poland, Russia, Germany, and the USA. It is famous for being fun and easy to read; it is infamous for being historically inaccurate.

### THE “LADY” IS A SCIENTIST

In chapter 1 of *The Lady Tasting Tea*, we read of “a summer afternoon in Cambridge, England, in the late 1920s.” R. A. Fisher was having tea with a group of “university dons, their wives, and some guests.” Since the woman Fisher was serving claimed to be able to discern between tea with the milk added to the cup first versus the opposite, he set up an experiment to test her. This moment is considered by many to be the birth of experimental design. The same event is described in the biography written by Joan Fisher Box (1978), R. A. Fisher’s daughter. There, we learn that the afternoon tea took place in Harpenden, at Rothamsted Experimental Station. The tea-tasting woman was no wife or guest of a Cambridge University don, she was Dr. B. Muriel Bristol, an algae biologist and colleague of Fisher at Rothamsted. This discrepancy can and should be worked into the course. Instead of ignoring it, students are assigned to read the key passage of the biography to supplement chapter 1 of *The Lady Tasting Tea*. This example is particularly rich, and should be accompanied by a third reading, an article by Stephen Senn (2012), which even includes a picture of Dr. Bristol. Students are asked to compare and contrast these versions of the story.

### FISHER’S DEATH

An example of a relatively minor mistake is Salsburg’s account (2001, p. 180) of Fisher dying on the boat back to Australia in 1962. Two sources contradict this: *R. A. Fisher, The Life of a Scientist* (1978, pp. 476-479) and an article by John Ludbrook (2005). After these readings, class discussions can address if it is “OK” for Salsburg to get some of the details wrong.

### THE BIG PICTURE

It is our hope that students will realize the book’s flaws without losing faith in it completely. After all, our goal is to strengthen students’ interest in statistics by exposing them to some of the history behind it. We hope that students will get even more curious and continue to study both statistics and history.

### REFERENCES

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