In this work, Dr. John Snow aims to understand the terrible outbreak of cholera in London in the mid-19th century. By observing the cases marked on maps, Dr. Snow proposed that cholera is transmitted through contained water sources. Furthermore, his intervention that removed the handle of the pump in Broad Street led to a drop in cholera cases in the area.

This work is known as the pioneering work for modern epidemiology and has been introduced in my previous epidemiology classes. I think the way in which Dr. Snow conducted this work can be interpreted as a data-driven approach to analyzing the underlying mechanism of the disease: he collected samples, visualized collected data, observed the clustering pattern, and drew his conclusion. He even provided an analysis of the reason and impact of the missing data. The logical reasoning of the work is quite impressive considering this work was published over 100 years ago, though there is a lack of statistical analysis in the work. Last but not least, I feel good that cholera is under control in most places of the world.