

Week 10 Writing Activity: Chapter 7 of the *Scientific Attitude*

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1 Scientific Fraud and Moral Reasoning

1. Reflect for a moment on the idea of a *moral compass*, or the idea that our well-formed conscience gives us instincts about right and wrong. From where do you draw moral conclusions about situations in life?

2. In Chapter 7 of *The Scientific Attitude*, we find the following statements about fraud.

- A: If one has committed fraud, then one has intentionally fabricated or falsified data.
- B: If one has intentionally fabricated or falsified data, then one has committed fraud.

According to the author, is fraud best described by: (a) statement A only, (b) statement B only, or (c) statements A and B?

3. Consider the following criteria for discerning whether or not an action is wrong:

- (a) *Free will, or complete consent*: the idea that a person can freely choose to do an action
- (b) *Grave matter*: the idea that the action in question is a grave matter
- (c) *Full knowledge*: the idea that a person fully understands an action is wrong

Consider the story of Dr. Andrew Wakefield and the false link between the MMR vaccine and autism. Match each of the facets of the story below with one or more of the three moral criteria (a)-(c).

- The case series study included only 12 children and their families.
- Dr. Wakefield had prepared a patent for a competing MMR vaccine to the standard one.
- Dr. Wakefield was being paid by a lawyer in the process of filing a lawsuit against the pharmaceutical companies that produce the MMR vaccine.
- Dr. Wakefield altered data from the study that was entered into the article in the *Lancet*.
 - (a) Nine of the twelve children were reported to have regressive autism, when only one did.
 - (b) Five children displayed symptoms of autism before receiving the vaccine, but this was omitted from the paper.
 - (c) Eight families suggested a link between autism and the vaccine, but only the allegations that included “days” as the time-scale, rather than “months,” were included in the paper.
 - (d) The study was funded by people planning litigation, and patients were recruited by activists.

4. **For the professor:** Conduct a group discussion regarding the negative result of the planet orbiting a pulsar.