

FRST 101: Freshman Studies II Winter 2012
Instructor: Stoneking
Handout #5: GOULD, BULLY FOR BRONTOSAURUS

Monday 30 January 2012:

- Read essay #9: **Not Necessarily a Wing** (pp. 139-154) and essay #4: **The Panda's Thumb of Technology** (pp. 59-78)
- Specific discussion topics/questions for **Not Necessarily a Wing**:
 - Identify the thesis and/or main point(s) of this essay and be ready to read specific quotations that exemplify it/them.
 - What are Cope and Mivart's critiques of Darwin's theory? What is the paradox? What is the importance of this critique and the possible answers to it?
 - What are "incipient stages of useful structures?"
 - What does "functional change in structural continuity" mean?
 - What does Gould dislike about the term "preadaptation"? What term would he prefer we use? Why? What does this imply about his worldview vs. the worldview of those who coined or use the term?
 - Why do smaller animals have a harder time regulating their body temperature than larger animals?
 - Describe the experiments of Kingsolver and Koehl. What hypothesis is being tested? Does it matter whether the experiments were done on live animals or models? Why or why not?
 - How does the graph on page 150 support Gould's view of the evolution of wings? What does this graph add to your understanding of the issues and the results relative to the prose descriptions that precede it? Why is this graph in this essay when most other essays have no such graphs?
- Specific discussion topics/questions for **The Panda's Thumb of Technology**:
 - Identify the thesis for this essay.
 - What, if anything, does the history of the QWERTY keyboard have to do with evolution?
 - Be prepared to discuss the importance of *contingency* and *incumbency* in this essay.
 - What does the Panda's thumb have to do with Gould's thesis in this essay?
 - Gould includes an extended disclaimer in this essay beginning with the last paragraph on page 63 and continuing through the second paragraph on page 66. Why does Gould feel it is so important to issue this disclaimer?

Wednesday 1 February 2012: Lecture by Professor Bart DeStasio

- Read essay #34: **The Face of Miranda** (pp. 489-498)

Complete a lecture reaction form (available on my website) and submit it before class on Friday.