## FRST 101: Freshman Studies II Winter 2011 Instructor: Stoneking Handout #2: GOULD, <u>BULLY FOR BRONTOSAURUS</u>

## Friday 21 January 2011:

Read the assigned essays (twice). As you read these essays pay attention to the voice Gould employs. In particular, when does he use the first person and why?

Think about the following topics/questions and be prepared to discuss them in class.

## • Essay #9, Not Necessarily a Wing:

- As always ... identify the thesis and/or main point(s) of this essay and be ready to read specific quotations that exemplify it/them.
- What are "incipient stages of useful structures?"
- What does "functional change in structural continuity" mean?
- Explain "preadaptation." What is the term Gould would prefer we use for this concept and why?
- Why do smaller animals have a harder time regulating their body temperature than larger animals?
- Describe the experiments of Kingsolver and Koehl.
- How does the graph on page 150 support Gould's view of the evolution of wings?
- o Whose misconceptions or biases is Gould criticizing in this essay?
- What do the *Spandrels of San Marco* [see figure below from the paper by Gould and Lewontin *Proc. Royal Soc. London, Series B* **205**, 581 (1979)] that Professor DeStasio mentioned in his lecture have to do with this essay?



## • Essay #22, Krapotkin Was No Crackpot:

- As always ... identify the thesis and/or main point(s) of this essay and be ready to read specific quotations that exemplify it/them.
- o What is Krapotkin's thesis (as presented by Gould) in his work, Mutual Aid?
- How does it compare/contrast with the "English school of Darwinism?" Who were some of the major figures that influenced this view of the world?
- To what influence(s) does Gould ascribe the "Russian school of Darwinism" as expressed (in English) by Krapotkin?
- How does Gould feel about using nature (and Darwinian evolution in particular) as a guide to human social, political, and moral actions?
- o How does this essay relate to Professor DeStasio's lecture?