

MAKING A PERSUASIVE ADAPTIVE ARGUMENT

There are many hypotheses in science which are wrong. That's perfectly all right; they're the aperture to finding out what's right. Science is a self-correcting process. To be accepted, new ideas must survive the most rigorous standards of evidence and scrutiny.
--Carl Sagan

OBJECTIVE:

In Paper 1, you are asked to write a position paper that makes an argument about the nature of adaptation between humans and disease. In order to do this, you have to make your understanding of adaptation very clear to your readers, and demonstrate the logic of your argument. If you have clearly laid out the sequence of your assumptions and ideas (and how these are based on the literature), your readers should be persuaded to come to the same conclusions that you do. In this exercise, you will work in groups to practice making an adaptive argument. You are asked to come up with the same type of points you need for your Paper 1, and structure them into a persuasive argument.

SCENARIO:

Cholera is an acute intestinal infection caused by ingestion of food or water contaminated with *Vibrio cholerae* bacteria. It has a short incubation period, from less than one day to five days, during which the bacteria rapidly multiply in the small intestine. Cholera causes a copious, watery diarrhea—filled with *V. cholerae*—which can quickly lead to severe dehydration and death if treatment is not promptly given.

Cholera arrived in North America for the first time in 1832, carried by Irish immigrants. As it spread rapidly through the Midwest and Northeast United States, it was common for people to flee into the surrounding countryside.

Adaptive claim: Flight from cholera in this situation is adaptive.

- Do you agree with this claim?
- What other information do you need to know?
- How could this claim be tested?

DIRECTIONS:

Your team will be assigned a position to take on this adaptive claim: agree or disagree. You will confer with your team, after which we will open up to the full class for discussion. With your team, agree upon how to defend your assigned position. What assumptions do you need to make about the scenario? Be explicit! **Take notes.**

The discussion is not intended to be a formal debate, but instead is a way for you to share and develop your ideas with your classmates. Question your classmates' ideas. How do they differ from those your group came up with?

1. Think about our class discussion of Lepowski's adaptive claim, and my subsequent email. What were strengths and weaknesses of her argument? What kinds of questions did we ask of her ideas? Apply these questions to the cholera scenario.
2. With your team, answer the following with regard to your team's adaptive argument (There's room to write your answers on the back of this sheet.):
 - a. What do you mean by "adaptive?" What is "adaptation" in this context?
 - b. Adaptive for whom?
 - c. What are the strengths and limitations of this adaptive explanation?
 - d. Are there reasonable alternative to an adaptive explanation (if so, explain)?
 - e. What type of future research could test this claim of "adaptation?"
 - f. How do human actions affect the spread of cholera? Is this different from other diseases like tuberculosis or malaria?

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HOMEWORK

1. Think about the class discussion. Regardless of what position you were assigned for class, do you agree with the adaptive claim? Post and/or respond to another student’s post with 1-2 paragraphs which describe your own opinion *as a persuasive argument*. Practice defining and using your terms as you will do in Essay 1 to answer:
 - a. Do you agree with the adaptive claim?
 - i. What other information do you need to know?
 - ii. What is “adaptation” in this context?
 - b. How could this claim be tested?
 - c. Did you stay with the point of view you were assigned in class or did you switch? Why?
2. In preparation for Paper 1 reread the prompt, and write down a draft of your thesis and some notes/ideas/outline for your essay. It’s okay if you’re still thinking through the topic; just write down your ideas at this point. Bring your thesis draft and notes to class for discussion, as well as your completed 1-9B, coursedoc 1-16, Ostrowski 2002, and the Unit 1 Prompt.