

# Phil. 103: Introduction to Logic

## Class Exercise: Fallacies of Presumption Answers

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*Directions:* Identify the informal fallacies in the following passages. Choose from the fallacies of complex question, false cause, *petitio principii*, accident, and converse accident.

1. Studying a subject too much and in too much depth is often confusing for the reason that when you study so much and so intensively the main points of the subject are no longer clear.  
*petitio principii.* The premiss and the conclusion of this argument are logically equivalent, so no supporting reasons are being offered for the conclusion.
2. Studies have shown that people who attend sports events regularly suffer more cardiac arrests on the average than those people who do not attend regularly. Thus, we can confidently conclude that regular attendance at sports events is a important factor producing poor cardiac health.  
false cause. (*post hoc ergo propter hoc*). The argument states that attendance at sports events are often occasioned by persons suffering cardiac arrests, so the attendance is the cause of heart trouble. One event following another is not a sufficient reason to conclude that the first event caused the second to occur.
3. Even though Bob Smith worked long and hard hours on the corporate summer progress report, the chairman of the finance committee showed that Smith's efforts amounted to a superficial presentation. It's obvious that Bob just can't be relied upon to produce adequate reports.  
converse accident. Simply because one person concludes that Smith's report was inadequate, it cannot be logically concluded that all of his writing would be substandard.
4. How can the nation cover rising health care costs, pass legislation for lower taxes for our citizens, support our armed forces for a strong national defense, protect the farmer from high interest rates and rising fuel costs, and simplify the bewildering array of interstate commerce laws? It's obvious that major the political parties can't do this—there's only one viable solution, vote Independent in the next election.

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complex question. The passage assumes that contrarily opposed national problems only admit of solution by voting Independent without any evidence adduced for this assumption.

5. Reporters for the national media have pointed out that at one time or another Richard Nixon, Lyndon Johnson, and Bill Clinton all met with major corporate lobbyists in their Washington offices before they became President. It's a foregone conclusion of these news stories that all politicians at one time or another fall under the spell of these influence peddlers.

converse accident. From the supposed fact that three U. S. Presidents met with lobbyists, it does not follow that all politicians are influenced by lobbyists. Additionally three Presidents are atypical of the class of politicians.

6. Much as the result of civil rights legislation over the past fifty years, the laws of the United States clearly oppose discrimination on the basis of race, gender, or religious belief. For this reason, the Greenwood Women's Book Club as well as the Greenwood Men's Garden Club should prove to be illegal organizations.

accident. The civil rights legislation does not apply to private organizations, which are exempt, and so are exceptions to the civil rights laws.

7. There can be no doubt that women are better poets than men because they uniformly write better poetry than men do and men plainly do not write poetry as well.

*petitio principii*. The premiss and the conclusion of this argument are logically equivalent, so no statement is proved.

8. I can see that you are greatly impressed with this logic course and all the new ideas you are learning. Therefore, are you going to sign up for scientific reasoning or symbolic logic next semester? Either one or both would be fine.

complex question. The presupposition that if one likes a logic course, then one will, for that reason, consider enrolling in one of two related courses is unfounded.

9. George H. Wendelmyer, the Nobel Prize winning chemist, became a great researcher because in his early childhood, his parents and his teachers felt that he wouldn't amount to much. Had they nagged him to study science, he never would have developed a life-long interest in the molecular forces of nature.

false cause. (*post hoc ergo propter hoc*) From the facts that Wendelmyer was neglected as a child and he made significant scientific discoveries later in life, we cannot logically conclude that events in his childhood were the cause of the discoveries he made later.

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10. When I visited New York last summer, several persons spoke to me as I was standing on the sidewalk hailing a taxi. As this incident proves, New Yorkers should advertise their city as the friendliest city on the East coast.
- converse accident. The generalization that persons in New York city are friendly is not entailed by citing one occasion where several persons in New York exhibited friendly behavior.
11. I realize that Representative Howard Duggan denies that he misappropriated funds from Federal Commerce Committee, and I don't find his denial that surprising. After all, he has repeatedly refused to answer the question as to whether he pocketed those funds for his own private purposes or used the illegally obtained funds to help finance his wife's campaign for the local school board.
- complex question. There is no reason to suppose that since Representative Duggan refuses to answer loaded questions presupposing his misuse of funds that his denial of misusing funds would be suspect.
12. All citizens of this great nation are guaranteed equal rights and are protected by civil right legislation passed by Congress and signed into law by the President of the United States. Therefore, any citizen, regardless of age or SAT score, or any other factor, has the equal right of attending this university.
- accident. The criteria for acceptance at a university is not relevant as an instance, *ceteris paribus*, to the kinds of cases covered by the principles of civil rights legislation.
13. As a daughter when I was four, my father taught me the beauty of numbers, and I have excelled at mathematics ever since. My conclusion on why females do not score as high on math tests is that the males with a high aptitude for mathematics are not spending enough time with their daughters.
- converse accident. This passage is not specifically false cause, since the reasoning is from one instance of a father helping a daughter to a generalization of all instances of fathers helping their daughters.
14. I know of several art students who were forced to take freshman algebra and dropped out of college. Obviously, being forced to take algebra resulted in their losing interest in continuing their higher education.
- false cause. (*post hoc ergo propter hoc*). From the fact that several art students taking algebra dropped out of college, one cannot conclude necessarily that the taking of the algebra class caused the students to leave college.
15. If you think about it carefully, you will realize that no one and no circumstance can prevent you from becoming a self-understanding person. After all, who is stopping you at this very moment? No one.

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complex question. The argument presupposes by the phrasing of the question that no persons or events can prevent someone becoming knowledgeable about himself or herself simply on the basis that such an individual would be unable to identify such a person or event at the present time.

16. The programs of the Fair Play for Animals Committee are sound and thoughtful policies for the improvement of our National Parks and have been endorsed by the Federal Wildlife Conservancy Project. The endorsement by the Federal Wildlife Conservancy Project is known to be a reliable recommendation because the Fair Play for Animals Committee has backed the Conservancy since its inception.

*petitio principii.* The programs of the Fair Play for Animals Committee are said to be endorsed by the Federal Wildlife Conservancy Project which, in turn, is endorsed by the Fair Play for Animals Committee, the same committee whose programs are at issue.

17. Statistical data drawn from the U. S. Census Bureau's Census 2000 data show that counties in southeastern United States have on the average the highest per capita murder rates in the nation. These data also show that these same counties have the highest per capita members of religious fundamentalist churches. Consequently, the deep and strict adherence to basic principles and the resulting intolerance represented by prevalent attitudes endemic to these areas contribute to higher rates of violence.

false cause. (*non causa pro causa* From the fact that two kinds of events occur in a geographic location, it does not follow that one kind of events would be the cause the other kind.

18. If there is one rule that all children should follow it's "Honesty is the best policy." Moral rules have no exceptions. So when any adult not known to the child asks a child at home if her parents are there and the child does not tell the truth when responding, "Yes, but they cannot come to the door right now," then the child should be punished for violating this fundamental moral rule.

accident. A general moral rule is being applied in a unusual circumstance not subsumable under the scope of the rule. That is, the circumstance being described where the child might be in danger is an exceptional case, a circumstance in which it would be correct for the child not to tell the truth.

19. Last Saturday morning I went to the library to work on my psychology term theme. The library was closed. I can't see how instructors at this university can expect us to get our research done when the library is never open when you need it.

converse accident. From one occasion of finding the library closed, one cannot conclude that the library is always closed.

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20. The Department of Education is puzzled by all of the criticism of the current K-12 policies instituted over the past twenty years in this state. After all, are these critics opposed to the educational programs that produced the workforce achieving the largest increase in scientific advancement and expansion of business and industry since the American Revolution? It's difficult to see how a return to old, outdated policies would be an improvement.

complex question. The phrasing of the argument presupposes that K-12 educational programs produced salutary effects on science and industry and the only kinds of policies that could be instituted are either the present ones or the previous policies. Neither assumption is warranted without some evidence presented.