Assume that all the facts and assertions in these paragraphs are correct. Why do the conclusions not follow? (This does not mean that the conclusions are actually false.) What are the alternative explanations for the facts? What tests would tend to confirm or disconfirm these explanations? There are no tricks here and only in question 1a is the specific wording crucial. Numbers 19 and 22 are of a different character in that they do not involve specific fallacies but should provoke thought.

1. Doctors have found that in patients with a specified set of symptoms a certain kind of spinal fusion operation produces a success rate of 72% (as measured by the patient’s assessment that he or she feels much better a year later). Therefore if you have those symptoms you should have the operation.

1a. Today older people tend to be more politically conservative than younger ones. The explanation lies in the aging processolder people are more set in their ways and have more to lose by social change.

2. There is a positive correlation between the per capita GDP of a country and the degree to which it is democratic. Therefore as the poor countries get richer, they will also become more democratic.

3. Taking a random sample of wars, we study debates within each country that preceded the decision to fight and find that in the majority of cases the decisionmakers, both civilian and military, were overoptimistic about the chances of victory. That is, they usually thought they would win and even if they did not, they thought they would do better than they actually did. From this I conclude that wishful thinking exists and is a cause of wars.

4. Taking a sample of Republican leaders, Republican voters, Democratic leaders, and Democratic voters, I compute the average LiberalConservative score for each group and find that while the Republican leaders are much more conservative than the Republican voters, the Democratic leaders are only slightly more liberal than the Democratic voters. From this I conclude that the individual Democratic leaders are moderates (in the sense of being close to the middle of existing political spectrum).

5. Many theorists claim that domestic instability tends to lead to foreign aggression. Others have made the opposite claim. The posited linkages are obvious. Assume that I develop a good measure of both variables. For each year I compute the total amount of domestic instability in all countries in the international system and correlate this with the total amount of external aggression by all states. I find no correlation at all and conclude that, contrary to both theories,
there is no connection between domestic instability and war. (There are at least two major related fallacies here.)

6. To test Galtung's proposition that status incongruity (i.e. being simultaneously high on some dimensions of international status and low on others) leads to aggressiveness, I correlate a measure of each state's status incongruity (whose validity is assumed to be correct) with the number and intensity of wars it has been in. I find no correlation and conclude that proposition is false.

7. In explaining the origins of World War II, A.J.P. Taylor is correct in making almost no reference to Hitler's extermination of the Jews. He is not concerned with making moral judgments about Hitler nor is he arguing whether or not the Allies should have made war on Hitler for the sake of those in Germany and the occupied territories. All he is trying to do is explain how and why the war started, the degree to which Hitler was unalterably aggressive, and the extent to which other countries share responsibility for the war. For questions such as these Hitler's racial policies are irrelevant. Without endorsing Taylor's answers to the questions he has set himself, or claiming that those questions are the most important ones, we can see that he was right to avoid being drawn into a discussion of Hitler's domestic policies.

8. In discussing the balance of power system, one author argues: "A system containing merely growthseeking actors will obviously be unstable; there would be no provision for balancing or restraint." (Donald Reinken, "Computer Explorations of 'Balance of Power'", Morton Kaplan, ed., New Approaches to International Relations, p. 469).

9. Finding generalizations is much less important than is usually thought. Although they are useful for description, they do not help to explain anything. Knowing that X happens often, or even that it always happens, does not help explain why X occurs.

10. To study whether wishful thinking (i.e. the distortion of perceptions by desires) is a cause of crises within an alliance I take several alliances and examine a random sample of crises (defined as a sudden and unexpected occasion in which the partners find themselves in disagreement over an important issue). In all cases I find that each partner had expected the other to act in support of, or at least acquiesce in his policy. I therefore conclude that empirical evidence shows wishful thinking to be a major cause of intraalliance crises.

11. It has been found that psychiatrists have the highest suicide rate of all occupational groups. This finding is explained by the proposition that becoming involved with other people's problems creates strains that often cannot be handled even by a person with professional training. (Assume that we have an accurate measure of suicide rates.)

12. Assume that we have good measures of the success of policies and the amount of
nongovernmental advice solicited. We find a strong negative correlation between these two measures. I conclude that the more the President listens to outside "experts" the worse off he will be.

13. Most Washington lobbyists say that they exert significant influence over the outcome of Congressional votes. On a series of close Congressional votes I ask Congressmen if they were influenced by lobbyists. The percentage answering "no" varies from 95 to 98. (Assume that Congressmen know what influences them and are telling the truth.) I conclude that, at least in the cases I have studied, lobbyists have little influence. (There are at least two major fallacies. Don't stop with the easy one.)

14. Since every war has a loser, we can deduce, without even having to examine the prewar debates, that in at least half of the cases the nation's leaders overestimated their chances of victory.

15. What inferences about discrimination can we draw from the fact that the average batting average of blacks in the major leagues is higher than that of whites? Or from the finding that within the group of science Ph.D.s who have had research and teaching jobs for at least three years, women produce good scientific papers at a higher rate than do men? What about the following argument: we take a sample of male and female sales personnel and management employees and find that the women "are at least as reliable, somewhat less complacent, and somewhat more sociable. Women are a bit more impulsive than men, and certainly do not trail men in their energy level or willingness to work." From this we conclude that

These (findings) clearly destroy many of the myths relating to sex difference in effective work potential and demonstrate that the under-representation of women in responsible jobs reveals that the process by which people are admitted to these jobs unfairly discriminates against women. (L.A. Times, Sept. 4, 1974, part 1A, pp.45).

16. An ad for a psychological biography of Nixon asked, "Did the bombing of Hanoi begin at the playing fields of Whittier?" What kind of evidence would be needed to confirm or refute the claim that Nixon's policy in Vietnam is best explained by his personality?

17. Psychological theories yield several related propositions about the effects of tensions and crises. Because of time pressures, limitations on information channels and information processing abilities, and emotional strains, we expect that in a crisis: 1) decisionmakers will tend to perceive the range of their own alternatives to be more restricted than those of the other side; 2) the search for one's own alternatives will become increasingly narrow; 3) as the crisis develops, more and more information is flatly rejected, and 4) dissenters are increasingly excluded from the centers of decision. To confirm or disconfirm these propositions I plan to study several crises that led to wars (e.g. July 1914, August 1939). In order to provide the
necessary comparisons, I will also study several crises that were resolved peacefully (e.g. Cuban Missile Crisis, Munich, Fashoda).

18. "The relevance of [Gerhard Ritter's discussion of Allied war aims in World War I to his] history of militarism in Germany is not easy to detect. One of Ritter's criticisms of Fischer was that he failed to talk about other people's war aims. This criticism only means that no German historian should say that Germany behaved badly without also showing that other nations behaved worse. Ritter shows here that the Allies' policy was at least no better than the Germans.'" (Norman Stone, "Gerhard Ritter and the First World War," in Historical Journal, vol. 13, 1970, p. 161).

19. Explanations in international relations, and in the social sciences in general, are different from those in the physical sciences because they fail to perceive the essential difference from the standpoint of causation, between a paper flying before the wind and a man flying from a pursuing crowd. The paper knows no fear and the wind no hate, but without fear and hate the man would not fly nor the crowd pursue. If we try to reduce it to its bodily concomitant we merely substitute the concomitant for the reality expressed as fear. We denude the world of meaning for the sake of a theory, itself a false meaning which deprives us of all the rest. We can interpret experience only on the level of experience. (R.M. Macliver, Society, p. 530).

This means that an understanding of international relations requires that we reconstruct the values, emotions, and calculations of decisionmakers. The only way to explain their behavior is to see the world the way they saw it.

20. To determine whether external or internal variables are a more important source of foreign policy, I measure some national attributes—e.g., size, level of political and economic development, nature of the regimes—some characteristics of dyads, e.g. geographical distance, similarity or difference of regimes, similarity or difference of power—and, as the dependent variables, events data on conflict and cooperation for each state and dyad. I propose certain hypotheses about the effect of each relationship and national attribute on the amount of conflict behavior it engages in; the closer the members of a dyad, the greater the conflict. (For the purposes of this exercise, the content of these hypotheses doesn't matter). When I compare the actual correlations with the predicted ones, I find a much closer match for the propositions involving national attributes than for the ones involving relations. From this I conclude that internal factors are more important causes of foreign policy than are external factors. (There are at least three fallacies here.)

21. To see whether the amount of conflictual behavior that a state initiates is inversely related to the amount of cooperative behavior it initiates, I group countries according to national attributes (e.g. see above). I find that there is a direct relationship. Those kinds of states that initiate a lot
of conflict (e.g. large, developed, powerful ones) also initiate a lot of cooperation. I explain this finding by the argument that to maintain even minimal order in the international system (and the data is gathered from a period of relative peace), nations cannot be totally hostile to each other. If peace is to be kept, a nation that initiates a lot of hostile behavior toward another must also initiate a significant amount of cooperative behavior toward it. As the data show, nations do not aim undiluted hostility at each other. (There are at least two fallacies here.)

22. "The historian need not and cannot (without ceasing to be a historian) emulate the scientist in searching for the causes or laws of events. For science, the event is discovered by perceiving it, and the further search for its cause is conducted by assigning it to its class and determining the relation between that class and others. For history, the object to be discovered is not the mere event, but the thought expressed in it. To discover that thought is already to understand it. After the historian has ascertained the facts, there is no further process of inquiring into their causes. When he knows what happened, he already knows why it happened...

The value of generalization in natural science depends on the fact that the data of physical science are given by perception, and perceiving is not understanding. The raw material of natural science is therefore 'mere particulars' observed but not understood, and taken in their perceived particularity, unintelligible. It is therefore a genuine advance in knowledge to discover something intelligible in the relations between general types of them. What they are in themselves, as scientists are never tired of reminding us, remains unknown: but we can at least know something about the patterns of facts into which they enter.

A science which generalizes from historical facts is in a very different position. Here the facts, in order to serve as data, must first be historically known; and historical knowledge is not perception, it is the discerning of the thought which is the inner side of the event. The historian, when he is ready to hand over such a fact to the mental scientist as a datum for generalization, has already understood it in this way from within. If he has not done so, the fact is being used as a datum for generalization before it has been properly 'ascertained'. But if he has done so, nothing of value is left for generalization to do.

If, by historical thinking, we already understand how and why Napoleon established his ascendancy in revolutionary France, nothing is added to our understanding of that process by the statement (however true) that similar things have happened elsewhere. It is only when the particular fact cannot by understood by itself that such statements are of value." (R. C. Collingwood, The Idea of History, pp. 214, 2223).

Both historians and political scientists should be able to agree that Collingwood is right. There may be universal laws and generalizations. If they exist, they are to be found through the cumulation of case studies. If we understand several cases, we can see what they have in common and how they differ. But each case must be understood in its own terms, by examining
it in detail in its own context. We cannot learn why an outcome occurred in one case, or why an actor behaved as he did in one instance, by looking at other cases. These comparisons come only after we have explained each case. For how could we explain one event or one problem by comparing it to others? This might tell us if the case was unusual or if we could construct a valid generalization, but it could not help explain the case itself. Since the causes of any outcome obviously lie in the preceding events, looking elsewhere is at best a distraction.

Thus, for example, the way to discover the impact of the frontier on American life and politics is to intensively study the American frontier itself—what life was like there, what were only myths, and what patterns were common. Turner's research was skimpy and his conclusions may be incorrect, but his general approach was surely the proper one. Similarly, it would be foolish to try to explain American foreign policy by looking at the foreign policies of other countries. For example, it is foolish to try to refute the revisionist arguments about American policy after World War II by comparing it to the policies of Russia and of the European states.

Furthermore, it is usually a basic intellectual error to try to find one explanation that can cover several cases. Even when the outcome is the same, e.g., American intervention abroad the causes often differ from case to case.

23. "White prejudice and any specifically Negro characteristics account for much less of the difference in employment rates between Negroes and whites than would otherwise appear." This is shown by the fact that when we look at what can be called "the Statistical Negro’—that is, the Negro when all nonracial factors (e.g., education, urban/rural residence, etc.) have been controlled for—is a very different fellow from what will be called the Census Negro. In some respects the Statistical Negro is indistinguishable from the white, and in all respects the differences between him and the white are smaller than those between the Census Negro and the white." Thus whatever the effects of previous discrimination, current discrimination is relatively unimportant. "If overnight Negroes turned white, most of them would go on living under much the same handicaps for a long time to come." (Banfield, The Unheavenly City, pp. 6973).

Think about this argument, and particularly the claim for the importance of comparing the achievements (e.g. income levels) of the Statistical Negro to that of whites.

24. "The strongly adverse relation between cigarette smoking and health led to the banning of cigarette advertising on television. Since television advertising of cigarettes was discontinued, sales have not been noticeably affected. With the awareness that the money previously spent on television advertising was seemingly wasted, it is not immediately obvious why the tobacco industry continues to advertise at all. Knowing the intensity of addiction experienced by most smokers, it is probably not necessary to convince them that they should smoke. Indeed, most regular smokers find it very difficult not to smoke and certainly don't need encouragement to continue. Yet, the tobacco industry continues to advertise heavily.
If the money spent on television advertising was useless, why continue the same practice in the printed media? What is the tobacco industry getting in return for their investment? One return is the promotion of the notion that smoking cigarettes is a matter of user's choice and not an uncontrollable addiction. A more disquieting possibility is that this investment serves as hush money, softening the telling of how bad the story of smoking versus health really is.


25. "Parolees...do little better in the community [as measured by the recidivism rate] than those who are not paroled [and serve out their full sentences], which suggests that 'discretionary release' is really potluck, and those who decide who gets paroled have only the sketchiest idea of who has been 'rehabilitated'." (Tom Wicker, "The Lessons of Parole", New York Times, March 8, 1974, p. 33).

26. 75% of cars that are stolen had been left unlocked. Therefore locking your car will reduce the chance that it will be stolen. (If this gives you trouble, 40 is similar and easier.)

27. In studying the factors that lead a state to conclude that others are a potential threat to it, I examine a number of cases where states have come to see others as a menace. In almost all these cases I find that the state seen as threatening had broken a "rule of the international relations game". From this I conclude that if one state breaks a "rule of the international relations game", others will see it as a threat. (Do not worry about the vagueness of the idea of "rules of the game").

28. I find that harsh peace treaties are usually followed by long periods of peace whereas soft treaties (i.e. those in which the winner does not take a great deal from the loser) usually lead to new wars quite quickly. I therefore conclude that I can tell decisionmakers of countries that win a war: "The best chance of ensuring that the peace will last is to be very tough and force the other side to accept harsh terms."

29. In disputing the argument that the Soviet Union consolidated its hold over East Europe not because she sought to expand as far as possible, but because she wanted to guarantee her own security against Western attack, one scholar points out that at the same time Russia was also encouraging secessionist movements in China, moves that cannot be explained by the desire for security. Is this line of argument legitimate?

30. Examining a random sample of wars, I find that the side that initiates the fighting (assume that we have solved the obvious empirical problem this involves) usually loses the war. From this I infer that it is usually politically and/or militarily disadvantageous to strike the first military blow.
31. In order to investigate the causes of Soviet armed intervention in East Europe, I look at the relevant cases: East Germany in 1953, Hungary in 1956, Czechoslovakia in 1968, and perhaps Poland in 1981, and find that each time the local Communist Party was losing control of the situation. I therefore conclude that the Soviets were very likely to intervene whenever their client parties are unable to keep the situation in hand.

32. In order to determine the proportion of cases in which a state is able to achieve military surprise, I look at a random sample of cases of the initiation of war. I find that surprise occurs in almost all of them. From this I conclude that most cases of attempted surprise succeed.

33. Studying the causes of all or most of the wars in international politics is fairly foolish: what we are most concerned with are wars which have very great consequences. Therefore we should mostly if not only study the causes of great wars such as World War I or World War II. (There are several problems here.)

34. In order to test the proposition that changes in the power relations among the leading states (what are often called "power transitions") is an important cause of major wars, one should look at the major wars that have occurred and see whether they were preceded by the posited power changes.

35. In order to reduce the amount of time I am likely to have to spend on the phone waiting to speak to someone who can make my airplane reservations, I plan to place my call at a time of day that few others are likely to be calling. (There are at least two problems here.)

36. The USSR was able to gain many more spies in the West than the latter was able to place in the USSR. The explanation must be either that Communism had greater ideological appeal in the West than capitalism and Western democracy did in the USSR or that the Soviets were willing or able to pay a great deal more for secrets than the West was.

37. According to the New York Times (June 4, 1997), a study conducted by the United Negro College Fund found that "contrary to the widespread belief that black students are a dominant presence in urban public schools, less than one-third of black public school students attend schools in large cities." (There is no assertion of causality here, but what is wrong with this sentence as a descriptive statement?)

38. In trying to support the claim that the US sponsored the coup in Iran in 1953 because of anti-Communism, not because of the desire to gain a share of the oil fields, one scholar notes that:

The Cold War was at its height in the early 1950's and the Soviet Union was viewed as an expansionist power seeking world domination. Eisenhower had made the Soviet threat a
key issue in the 1952 elections, accusing the Democrats of being soft on communism and of having "lost China." Once in power, the new administration quickly sought to put its views into practice: the State Department was purged of suspected communists, steps were taken to strengthen the Western alliance, and initiatives were begun to bolster the Western position in Latin America, the Middle East, and East Asia. Viewed in this context, and coming as it did only two weeks after Eisenhower's inauguration, the decision to overthrow Mossadeq appears merely as one more step in the global effort of the Eisenhower administration to block Soviet expansionism. (Mark Gasiorowski, "The 1953 Coup D'Etat in Iran," International Journal of Middle East Studies, vol. 19, September 1987, p. 275.)

Do you find this way of reasoning legitimate and persuasive?

39. To determine the causes of wars, I look at a random sample of wars, examining in detail the domestic, bureaucratic, and international factors that seem to be involved and from these results build a general theory about the relative importance of these influences.

40. Since most automobile accidents occur in trips of 5 miles or less, I should substitute long drives for short ones whenever possible.

41. In his famous 1954 Foreign Affairs article enunciating the massive retaliation doctrine, John Foster Dulles said that "a potential aggressor must not be left in any doubt that he would be certain to suffer damage outweighing any possible gains from aggression." Why is this neither necessary nor sufficient for deterrence?

42. To test the argument that the main sources of US weapons procurement policy lie in the outlooks and preferences of the armed services, I look at the weapons the US has bought over a period of years and see if they correspond to the services' desires.

43. In "Toughen the Will and You Toughen the Mind," Andrew Revkin reports (New York Times, July 21, 1997) on the effect of an Outward Bound program for inner-city teenagers:

87 percent...who participated in the...program either had graduated from school or were still attending, compared to an overall graduation rate of less that 40 percent at the school. Half the participants have gone to college.... Reading scores rise more than half a grade, and math scores even more.

The...teenagers were recruited...from ninth and tenth graders who scored in the bottom third of their class on literacy tests. More than two dozen were invited to try a three-day hike in the Catskills in May, but only 12 took up the offer. Now nine remain.

What inferences can one draw about the influence of this program on various categories of
Policy-maker: "If you scholars are good for anything, you should be able to tell me what policy instruments are likely to work under what circumstances. Can you? I need to know in order to guide me in what I should do in the future."

Eager scholar: "Yes, sir. I will examine the outcomes of a random sample of cases in which the US used economic pressure and compare the results with those that occurred in a random sample of cases in which the US used force."

Would this meet the policy-maker's requirements? What inferences could be drawn from this study? How would you design a better one?

45. A graduate program that believes it has greatly improved its quality over the past 5 years is shocked to find that yield (the percentage of those accepted into the program that actually enroll) has declined, not increased. Does this show that the program's reputation is lower than it was before? Would the inference be different if the yield at peer institutions had increased? declined? remained steady?

46. If I have a serious heart disease and want the best treatment, I should select the hospital that is the best as measured by the available statistics showing its rate of success in dealing with this disease.

47. Many HMOs offer to pay for health club memberships for those who join. The reason is that they want to encourage people to exercise and so stay healthy. (This is tricky. The statement may be correct, but what other--perhaps stronger--reason would there be for HMOs to make this offer?)

48. About 30 years ago, Brown University radically changed its curriculum by drastically reducing its requirements. Since then, its graduates have achieved much greater success after they graduate (assume the validity of the measures employed). This shows that the students learned much more from the new curriculum than from the old one. (There are at least two fallacies here.)

49. Everyone tells me that Professor Nit is a hard grader whose class is very challenging and Professor Wit, who teaches the same course, is an easy grader. But through a friend at the Registrar's office I have seen their grade sheets and the distribution of grades is the same. So the rumors must be incorrect.

50. "Smoking increases your chances of lung cancer by 900%." That is all you have to know to
conclude that you shouldn't smoke.

51. "65% of the deaths in accidents involving SUVs are due to rollovers, whereas only 22% of the deaths in car accidents come from this cause." (NBC Nightly News, 9/20/00.) From this we can infer that SUVs are much more prone to rollovers than are cars.

52. The dozen states that have chosen not to enact the death penalty since the Supreme Court ruled in 1976 that it was constitutionally permissible have not had higher homicide rates than states with the death penalty, government statistics and a new survey by the New York Times show.

Indeed, 10 of the 12 states without capital punishment have homicide rates below the national average, Federal Bureau of Investigation data shows, while half the states with the death penalty have homicide rates above the national average. In a state-by-state analysis, The Times found that during the last twenty years, the homicide rate in states with the death penalty has been 48 percent to 101 percent higher than in states without the death penalty.

The study by The Times also found that homicide rates had risen and fallen along roughly symmetrical paths in the states with and without the death penalty, suggesting to many experts that the threat of the death penalty rarely deters criminals.


Why does this not show that the death penalty fails to deter?

53. SUVs have a rollover rate (calculated as rollovers per 100,000 miles traveled) 3 times the rate of cars. From this we can infer that they must be less safe than cars. (There is one obvious fallacy here; once you have found it, look for 2 other deeper fallacies.)

54. In the wake of the Firestone/Ford tragedy, Congressional committees and newspapers will try to explain what happened and cast blame by examining the internal documents in the companies about this case. What the problem with proceeding in this way?

55. Public opinion polls revealed that most people oppose the impeachment of President Clinton. The behavior of the members of Congress who strongly pushed for impeachment therefore shows the weakness if not inaccuracy of the claim that politicians seek to maximize their chances of re-election.

56. Scholar A:

"Realism should predict that the strongest state will prevail in a crisis, and, for the Cold War, the only real dispute is over whether we should expect the conventional or the nuclear balance to be most important."
Scholar B:

"No, Realism predicts that as long as the situation approximates the game of Chicken, the state with the stronger reputation for resolve or with the greater stake in the issue should prevail."

What is wrong with both these claims?

57. "According to rational choice theory, a state will fight if the expected utility for going to war is greater than the utility of the status quo." Why is this statement incorrect?

58. Gore won the popular vote in the 2000 Presidential election. It follows that he would have been elected President had there been a previous change in the Constitutional eliminating the Electoral College and replacing it with a popular vote.

59. "Most students involved in school shootings discussed their plans beforehand and did things that could have telegraphed the attacks, two Secret Service agents said." (Judith Cohler, Associated Press story, July 18, 2001.) From this we can infer that wise public policy would be to act on these warning signs, immediately calling in for questioning students who display them.

60. It is striking how often borders between states of very unequal power are quite peaceful (e.g. US-Canada, France-Belgium), while conflict is more common when the neighbors are of roughly equal power. From this I can infer that rough equality of power is more conducive to conflict than is a very unequal distribution.

61. "The purpose of this book is to measure the capabilities of democracies in the realm of foreign policy by looking at the politics and institutions of two of the oldest and most prominent of democratic states." (Kenneth Waltz, Foreign Policy and Democratic States, p. 1.) In fact, this does not describe what the book does, which is to compare the foreign policy capabilities of Great Britain and the US. But if the sentence did give the book's purpose, it would fall into 2 methodological traps.

62. The proper way to conduct a post-mortem on why the US was taken by surprise by the terrorist attacks of September 11 is to go back over the information that was or should have been available to the CIA and FBI and ask whether this was sufficient to have enabled a reasonable person or organization to have inferred that this attack was quite likely.

63a. "We were debating whether to go to war with a particular country and I thought I had won the argument when I was able to convince my boss that the chances of victory were clearly greater than 50 percent."
63b. "Being wiser than I was in the previous case, I was sure I had won the argument when I showed my boss that, taking everything into account, the expected utility of starting the war was greater than the value of the status quo." Why might this not be a winning argument?

64c. "OK, this time I'm sure I've got it right. In this case, I was able to show that the expected utility of fighting was less than the value of the situation as it is today. I was sure that this would mean that no serious person could argue for fighting. But I was wrong yet again." Why?

65. Most international agreements are complied with. This disproves the common argument that difficulties in ensuring compliance explain why cooperation is difficult to develop and sustain in international politics.

66. To study the effects of whether a mother is employed outside the house on a child's achievements and adjustment (assume that I can measure these), I need not only to look for the overall correlation, but to use control variables in order to establish causation. Most importantly, I want to see if any relationship I find remains after I hold constant the income of the mother and the family.

67. "Every known human carcinogen causes cancer in animals." It follows that we should test all chemicals on animals for their carcinogenity and refuse to release any that fail the test. (Mount Sinai Center for Children's Heath and the Environment, "She's the test subject for thousands of toxic chemicals. Why?" New York Times, August 15, 2002.) (There are at least two problems here.)

68. The fact that the US was able to keep the USSR out of West Europe without a war shows the efficacy of the policy of deterrence.

69. Federal states like the US and the former Yugoslavia are more likely to have civil wars or dissolve than are unitary ones. The obvious lesson to those who are writing constitutions is to avoid a federal system.

70. High school dropouts on average earn $9,000 dollars less than those who complete high school. It therefore should be a major objective of public policy to decrease the number of dropouts. (There are two fallacies here).

71. There is a strong correlation between the extent to which a state is democratic and the extent to which it respects human rights. I infer that to protect the latter I should facilitate the former.

72. "Under Mayors Giuliani and Bloomberg crime in New York has significantly decreased. The obvious reason is the policing tactics they have adopted." What are the 2 obvious sources of
information that you could tap to judge the plausibility of this argument about causation?

73. I look at recent cases of attempted and successful revolution and find that most instances in which there was little if any violence were successful and that, by contrast, most cases in which there was significant bloodshed ended with the regime staying in power. From this I infer that rebels should use peaceful protest only.

74. To study whether some hospitals spend too much on desperately ill patients, I look at a sample of cases in which people died and see how much was spent on their care in the last two years of their lives. I find that the level of spending among excellent facilities varies by a factor of two. "We are comparing patients with identical outcomes--all were dead in two years--so it's unlikely that differences in severity of illness account for the [spending] variations we saw." (Robert Pear, "Researchers Find Huge Variations in End-of-Life Treatment," New York Times, April 7, 2008.) From this why can I not infer that the spending level in the more expensive hospitals was excessive?

75. “Almost half of those arrested for plotting or carrying out attacks against the U.S. had prior criminal records, mostly for small-time offenses, a study for New York State investigators found. Such interactions with local law enforcement represented possible opportunities to ‘detect and deter an attack,’ the study said” (Sean Gardiner, “Early Chances Often Missed In Terror Cases,” Wall Street Journal, January 3, 2011). What are the problems here? (The rest of the article does not point them out, showing yet again the embarrassment of journalism.)

76. Your doctor tells you “Take this medicine and it will cut in half the chance that you will get a particular kind of cancer even though it has somewhat unpleasant, although not dangerous, side-effects.” His statistic is correct, but it is not the one you want. What is?

77. During the summer of 2012, many analysts and American officials said things like: “In response to continued Iranian provocations, we’re instituting new sanctions. As they take hold and the pain inflicted on Iran increases, Western bargaining leverage will increase.” Assuming that the sanctions indeed are causing pain, that the population blames the government, and that the government cares, why does the conclusion not follow? (Note that that conclusion is not that Iran will give in, but just that Western leverage will increase as the sanctions take hold.)

78. To help people live through avalanches, I interview survivors about the techniques they used (e.g., staying clam, moving slowly, being guided by any light they see). I then print (and sell) a pamphlet detailing these methods to increase the chance that anyone caught can survive. Perhaps I shouldn’t. (There is both a fallacy and a problem here.)