

Thinking Straight Critical Reasoning Workshop 3-2 (April 15, 2011)

- I**
- A. (Individually)** follow the powerpoint review of the answers for today's assignment Put a check ✓ against largely correct answers, an X against largely wrong answers and a question mark ? if you aren't sure.
 - B. (In small group)** discuss any items that you found difficult be sure to review the last three .
 - C. Plenary** discussion of any remaining problems.

II Showing invalidity.

A. Plenary comments on showing invalidity

Sample: *Anyone who lives with a smoker has an above-average risk of heart disease. Sarah doesn't live with a smoker. So Sarah doesn't have an above-average risk of heart disease.*

B. In small groups put each into standard form and show that it is invalid using either the counterexample or possible situation method. .

1. If dinner guests are coming, then we need more food. If we need more food, then we need to go to the store.
Dinner guests aren't coming. Therefore, we don't need to go to the store.
2. No great singer has a weak voice. Kim is not a great singer. It follows that Kim has a weak voice.
3. If the American people feel overtaxed, then they put more Republicans in office. The American people don't feel overtaxed, so they won't put more Republicans in office.
4. All compassionate people are honest people. This is so because all good friends are compassionate people, and all good friends are honest people.
5. Anyone who is good at science is good at math. Anyone who is good at math is intelligent. So, anyone who is intelligent is good at science.

C. Plenary discussion of these examples.

III A. Comments on criticizing premises. Each of the following statements might occur as a premise in an argument For each statement, think about what you might say to persuade someone that the claim being made is not true—or at least that it is doubtful.

Some Ways to Cast Doubt on Premises

1. For a universal generalization of the form *All P1's are P2's* or *No P1's are P2's*, find a counter example.
2. For an if-then premise :Finding a clear case in which antecedent is true, and the consequent false
3. For any premise, point out further implications that are doubtful

Sample A: *All Swans are white.*

Sample B: *If capital punishment is abolished, then the homicide rate will increase more rapidly.*

Sample C: *All human action are performed for purely selfish reasons.*

B. In small groups criticize the following by casting doubt on the premises. Each of the following statements might occur as a premise in an argument For each statement, think about what you might say to persuade someone that the claim being made is not true—or at least that it is doubtful. Try to apply one the three ways suggested above. If you find yourself initially inclined to agree with a statement, try to imagine what an intelligent critic on the other side of the issue might say to cast doubt on it.

1. Any activity that poses a risk to the health of bystanders violates their rights.
2. No person should pay taxes to support parts of government that that person doesn't use.
3. If Asian countries are becoming more technologically advanced than the United States, then the United States should adopt their educational methods..

C. Plenary discussion of any problems or issues

IV Terminology

A. Small group. Chapter Four in the Critical Reasoning text provides a discussion of validity for deductive arguments. In the light of this discussion and the use of terms in the chapter address the following tasks

1. Devise an argument that is (a) valid but obviously unsound.
and (b) another that is invalid and has at least one false premise.
2. Determine which of the following statements make sensible use of the terms:

(a) *The argument you just gave is true*, (b) *Your conclusion is false*, (c) *Your statement is invalid*.

3. Consider which, if either, of these two statements are consistent—that is, for which of them can the two parts both be true together?

(a). *Your argument is sound, but not valid* and (b). *Your argument is valid, but not sound*.

B. Plenary discussion

V. **A. In small groups** for passages 1&2 and one of (3, 4 OR 5) below: first, set out the argument. (you might find it useful to sketch a version of the argument in standard form to help you determine its structure and whether it has any missing premises.); Second, indicate whether the conclusion follows and third, see if you can cast doubt on any of the premises. Use the methods discussed above and be prepared to put your group's reconstructed argument on the board.

1. We shouldn't allow doctors to determine the gender of a fetus whenever parents request it. This is so because if we allow such testing, then some parents will abort a fetus simply because of its gender.

2. People should pay taxes to support only parts of government they use. It stands to reason that people without children shouldn't be required to pay for schools.

B. Plenary discussion

3.

Religion and cloning

State Sen. Adrian Smith, in his effort to ban all types of human cloning in Nebraska, clearly is attempting to insert his religious dogma — that an embryo and a person are morally equivalent — into the law. There are compelling legal, scientific and religious reasons to disagree.

Science shows~ us that only a portion of the cells resulting from a fertilized human egg will, in a normal pregnancy, become a baby. Others are destined to become a placenta. In therapeutic cloning there is no intent of a baby forming, and thus no person whose rights should be protected. Religious teachings on the beginning of life vary greatly, and the Supreme - Court has ruled that law must be neutral with respect to religion.

When elected officials enact theology into criminal law, it's not only scientific research that comes under threat. Religious freedom is at stake as well.

Clay Farris Nail, *Lincoln*
Executive director, Center for the
Advancement of Rational Solutions

Omaha World Herald 1-17-04

4.

Make the separation official

It is time to separate the legality of civil unions from marriage. Marriage is a religious rite and institution performed by religious persons such as priests or ministers.

To maintain the separation of church and state, the government should not grant legal standing to this religious rite or any other religious rite. Priests and ministers would still be allowed to perform the religious rite of marriage, but such marriages would not have legal standing.

If couples want to obtain legal standing as "married," they should have to go through a separate civil-union ceremony. Such unions are legal matters and should require legal services. After all, when a couple wants to divorce, they go to their lawyers, not to their minister.

The result of all this would relegate the responsibility of upholding the sanctity of marriage to the church. Individual churches would control whom they allow to marry.

Government should not be in the position to decide what constitutes a good marriage:

— **Gene Ma, Everett**

Seattle Times, 4-16-05

5.

Aught is enough

The opponents of gay marriage are missing an important fact: overpopulation. The Catholic Church used to stipulate that marriage was primarily *for* procreation. The present position says that marriage is primarily for marital harmony.

Those against gay marriage say that marriage is mainly for procreation and thereby limited to heterosexuals. With 6.5 *bill*ion people on this planet, I would think any institution that emphasize more people is a recipe for self-destruction.

This emphasis on procreation is at the heart of most of the world's problems from sprawl, resource shortages, specie loss, to global warming.

A reasonable person could argue that gay marriage is actually more environmentally sustainable than the present form. The main reason for marriage, spiritually and rationally, should be for couple harmony.

—**Jack Pedigo,**
Seattle

Seattle Times, 4-16-05



Assignment for Tuesday April 19 Review: Ch 4 pp. 99-106, Ch 113-122 Read: Ch. 5 pp 123-128. Ch. 6, p. 143-157 Submit: Exercise 4.1, #4, #6, #8, #10; Exercise 4.2 #2, #4, #6 and 10 Exercise 4.3 A2,A4; B2, B4, C#1 b,d,f, C#2 b,d; as well as a **reconstruction and evaluation** of two (2) arguments picked from (3, 4 or 5 above) (**Optional Extra Credit** Exercise 5.1 A8, B2, B4, D4)