

Tuesday April 5, 2011 Day Schedule

Am: Critical Reasoning

- Review of Friday's Assignment
- Discussion of Today's Assignment
- Workshop on new material: Principle of Charitable Interpretation /
Using the list of Common Argument Patterns

Pm: Ethical Reasoning

- Review of Friday's Topics
- Workshop of Cultural Relativism
- Introduction to the discussion of Subjectivism

Comments on Critical Reasoning Assignment for Friday, April 1

- 1) As mentioned on Friday—useful to simplify in order to clarify structure
- 2) Tendency to display the whole argument as the “main claim” For our purposes, the main claim in the sense of “conclusion” is only part of the argument---the supporting points are the remainder
- 3) Related point—Look for structure—What kind of structure is the topic of today’s class
- 4) In order to show argument structure, don’t tack on a version of the reasons as part of the conclusion. E.G.” Concentrating on sealing the borders is an unreasonable goal that will have little chance of success and squander resources.”

Discussion of Chapter 2 Exercise 2.1

1. (1) Any friend of mine deserves my respect.
(2) Ed is a friend of mine.
∴ Ed deserves my respect.

3. (1) If your mind were organized, your desk would be organized.
(2) Your desk isn't organized.
∴ Your mind isn't organized.

13. (1) A nonwhite murderer whose victim is white is much more likely to be executed than a white murderer whose victim is either white or nonwhite.
(2) If that is the case, then either this kind of discrimination should be eliminated, or the death penalty should be abolished.
(3) This kind of discrimination cannot be eliminated.
∴ Capital punishment should be abolished.

II *Sample* and items 1) and 2)

Sample (1) If you buy a fur coat, then you are supporting the fur industry.

(2) If you are supporting the fur industry, then you are encouraging cruel
treatment of animals.

∴ If you buy a fur coat, then you are encouraging cruel treatment of animals.

1) (1) Every person has the capacity to kill.

(2) All those who have the capacity to kill should avoid keeping loaded guns
around the house.

∴ Every person should avoid keeping loaded guns around the house.

2) (1) Either the United States will tackle the real social ills that beset its cities, or
it will lose the “war on drugs.”

(2) The United States will not tackle the real social ills that beset its cities.

∴ The United States will lose the “war on drugs.”

Some Common Successful Argument Patterns

Statement-Based Patterns

Argument Pattern	Examples
i. Modus Ponens	
(1) <i>If A, then B.</i>	(1) <i>If I lie, then I'll be sorry.</i>
(2) <u>A.</u>	(2) <u>I'll lie.</u>
∴ B.	∴ I'll be sorry.
ii. Disjunctive Argument	
(1) <i>Either A or B.</i>	(1) <i>Either I should exercise or I should diet.</i>
(2) <u>Not A.</u>	(2) <u>I should not exercise.</u>
∴ B.	∴ I should diet.
iii. Modus Tollens	
(1) <i>If A, then B.</i>	(1) <i>If you study, then you learn.</i>
(2) <u>Not B.</u>	(2) <u>You didn't learn.</u>
∴ Not A.	∴ You didn't study.

Modus Ponens and a similar but faulty pattern

(1) *If A, then B.*

(2) *A.*

$\therefore B.$

MODUS PONENS *or*
AFFIRMING THE ANTECEDENT

(1) *If A, then B.*

(2) *B.*

$\therefore A.$

AFFIRMING THE CONSEQUENT
(*Faulty*)

Footnote on p. 32

⁵Notice that what remains after the repeated elements are marked by the letters *A* and *B* is the expression “if . . . then.” This expression along with “or” and “and” are called *logical connectives*—they connect two statements. Special symbols are sometimes used to represent them: the arrow, \rightarrow , for “if . . . then”; the ampersand, $\&$, for “. . . and . . .”; the *vel*, \vee , for “or.” This way of showing form is discussed at greater length in Chapter 5, which covers a more formal approach to deductive arguments. We could represent *modus ponens* as:

(1) $A \rightarrow B$.

(2) A .

$\therefore B$.

Modus Tollens and a similar but faulty pattern

(1) *If A, then B.*

(2) *Not B.*

\therefore *Not A.*

*MODUS TOLLENS or
DENYING THE CONSEQUENT*

(1) *If A, then B.*

(2) *Not A.*

\therefore *Not B.*

*DENYING THE ANTECEDENT
(Faulty)*

Footnote p. 33

⁶In addition to the symbols \rightarrow , $\&$, and \vee (for “if . . . then,” “and,” and “or,” the symbol \neg or just a dash, $-$, is often used for “It is not the case that . . .”. Unlike the first three symbols, which come between two statements, \neg stands in front of a single sentence. Using this symbol, we can represent *modus tollens* in this way:

$$\begin{array}{l} (1) A \rightarrow B. \\ (2) \neg B. \\ \hline \therefore \neg A. \end{array}$$

iv. Hypothetical Argument

(1) *If A, then B.*

(2) *If B, then C.*

∴ If A, then C.

(1) *If I pay now, then I'll save.*

(2) *If I'll save, then I'll have money later.*

∴ If I pay now, then I'll have money later.

v. Chain Argument

(1) *A.*

(2) *If A, then B.*

(3) *If B, then C.*

∴ C.

(1) *The whole group is coming.*

(2) *If the whole group is coming, then we'll need more refreshments.*

(3) *If we'll need more refreshments, then we'll have to go to the store again.*

∴ We'll have to go to the store again.

Predicate-Based
Patterns

vi. Predicate Instantiation

(1) *All P1s are P2s.*

(2) *m is a P1.*

∴ m is a P2.

(1) *All good teachers are sensitive to the
needs of students.*

(2) *Jones is a good teacher.*

∴ Jones is sensitive to the needs of students.

vii. Universal Syllogism

(1) *All P1s are P2s.*

(2) *All P2s are P3s.*

∴ All P1s are P3s.

(1) *All good teachers treat students with respect.*

(2) *All who treat students with respect listen
to students.*

∴ All good teachers listen to students.

III A. and B

Sample (1) If you buy a fur coat, then you are supporting the fur industry.

(2) If you are supporting the fur industry, then you are encouraging cruel treatment of animals.

∴ If you buy a fur coat, then you are encouraging cruel treatment of animals.

(1) If A, then B. Hypothetical Argument

(2) If B, then C.

∴ If A, then C.

1) (1) Every person has the capacity to kill.

(2) All those who have the capacity to kill should avoid keeping loaded guns around the house.

∴ Every person should avoid keeping loaded guns around the house.

(1) All P_1 's are P_2 's. Universal Syllogism

(2) All P_2 's are P_3 's.

∴ All P_1 's are P_3 's.

2) (1) Either the United States will tackle the real social ills that beset its cities, or it will lose the "war on drugs" and narco-terroism.

(2) The United States will not tackle the real social ills that beset its cities.

∴ The United States will lose the "war on drugs" and narco-terroism.

(1) Either A, or B. Disjunctive Argument

(2) Not A.

∴ B

III *Guns and Free Discourse* example

(1) If artistic expression is constitutionally guaranteed, then gun ownership is constitutionally guaranteed.

(2) Artistic expression is constitutionally guaranteed.

∴ Gun ownership is constitutionally guaranteed.

(1) If A, then B

(2) A

∴ B

modus ponens

An alternative version

(1) If gun control is constitutional, then it is constitutional to restrict artistic expression.

(2) It is not constitutional to restrict artistic expression.

∴ Gun control is not constitutional.

(1) If B, then A

(2) not A

∴ not B

modus tollens

An more elaborate alternative version

- (1) If gun ownership is not constitutionally guaranteed, then artistic expression is not constitutionally guaranteed.
 - (2) Artistic expression is constitutionally guaranteed (i.e. It is not the case that artistic expression is not constitutionally guaranteed.)
- ∴ Gun ownership is constitutionally guaranteed (i.e. It is not the case that gun ownership is not constitutionally guaranteed)

(1) If not B, then not A

(2) A (i.e not (not A))

∴ B (i.e not (not B))

version of modus tollens

What are the Patterns for sample items from Ex. 2.1

1. (1) Any friend of mine deserves my respect.
(2) Ed is a friend of mine.
 \therefore Ed deserves my respect.

vi. Predicate Instantiation

(1) *All P1s are P2s.*

(2) *m is a P1.*

\therefore *m is a P2.*

3. (1) If your mind were organized, your desk would be organized.
(2) Your desk isn't organized.
 \therefore Your mind isn't organized.

iii. Modus Tollens

(1) *If A, then B.*

(2) *Not B.*

\therefore *Not A.*

13. (1) A nonwhite murderer whose victim is white is much more likely to be executed than a white murderer whose victim is either white or nonwhite.
- (2) If that is the case, then either this kind of discrimination should be eliminated, or the death penalty should be abolished.
- (3) This kind of discrimination cannot be eliminated.
-
- ∴ Capital punishment should be abolished.

(1) A.
(2) If A, then B or C. ARGUMENT Pattern
(3) not B
∴ C.

AS TWO SEPARATE ARGUMENTS

(1) A.
(2) If A, then B or C.
∴ B or C.

Version of Modus Ponens

(1) B or C.
(2) not B
∴ C.

Disjunctive Argument

What's the Pattern

A.

If a human being is created at the moment of conception, then abortion always kills a human being. If abortion always kills a human being, then it is never justified. If a human being is created at the moment of conception, then abortion is never justified

B.

Roberta will eventually become desensitized to violence. Everyone who watches a lot of violent films eventually becomes desensitized to violence. Roberta watches a lot of violent films.

C,

If capital punishment deterred murder better than life imprisonment, then states with capital punishment would have lower murder rates than states with life imprisonment only. States with capital punishment do not have lower murder rates than states with life imprisonment only. Capital punishment does not deter murder better than life imprisonment.

That's All Folks