

# Friday April 22, 2011 Schedule for the Day

Am: Critical Reasoning

- Comment's on Friday's Assignment
- Discussion of Today's Assignment
- Workshop on "new" material: Fallacies involving emotion;  
table methods for validity; more on equivocation

Pm: Ethical Reasoning

- Kantian Ethics

WEEK	TUESDAY	FRIDAY
WK 4 Apr 19 Apr 22	Am CR: Evaluating Arguments 2 (Read C&P Ch 5 to p. 133) Pm ER: Utilitarianism (Read: R&R, Ch. 7 & 8):	Am CR:Fallacies (Read C&P Ch 6 Remainder, Ch 7 to p. 186 Pm ER: Ethics: Kantian Ethics, (Read: R&R, Ch. 9 & 10):
WK 5 Apr 26 Apr 29  <b>Change</b>	Am Review of fallacies and preparation for CR Exam No New Reading  <b>5 Portfolio entries due</b>  Pm Conceptual Theories (Read C&P Ch. 7 Remainder) Bring both CR and Ethics Texts	Am Exam I  Pm “Gone Baby Gone” Video and Discussion

Your **Portfolio due Tuesday April 26<sup>th</sup>** should containing at least five (5) items (editorials, letters to editor, opinion pieces, short internet selection, short section from book or longer article, etc ); for at least two (2) reconstruct an argument into standard form (with missing, implicit premises or conclusion supplied if necessary); evaluate at least one (1) of those you reconstructed by indicating whether it is valid (using common successful argument patterns or methods of chapter 4 or 5) and if so whether it is sound by casting doubt, if appropriate, on the premises.

## Comments on Critical Reasoning Assignment for Friday, April 1

Generally good job. Although it is enough to show that an argument is invalid—by finding an example of its pattern with true premises and a false conclusion—to show that it is unsound, you should also practice explaining this by describing an invalidating situation.

## Discussion of Chapter 4 Exercise 4.4 A #2, #4, #8, #10,

A2. The United States is not really democratic, since if it were democratic, each person's opinion would have a significant effect on government

*(1) If the United States were democratic, each person's opinion would have a significant effect on government.*

*(2) Each person's opinion does not have a significant effect on government. (IMPLICIT)*

*∴ The United States is not democratic.*

The conclusion follows from the premises (modus tollens), but the premises are doubtful. If “having a significant effect on government” means, for example, being able to vote in elections and having your vote counted, then the implicit premise is doubtful. At least, each adult who is eligible to vote can do so. If “having a significant effect on government” means having government do what each person wants, then the implicit premise is true but the stated premise is clearly false. Such a requirement would be impossible for a government to fulfill.

A4. If you should not be blamed for what your ancestors did, then neither can you take pride in their deeds. It would follow that you are not entitled to take pride in what your ancestors accomplished.

*(1) If you should not be blamed for what your ancestors did, then you aren't entitled to take pride in your ancestors' accomplishments.*

*(2) You should not be blamed for what your ancestors did. (IMPLICIT)*

*∴ You aren't entitled to take pride in your ancestors' accomplishments.*

The conclusion follows from the premise with the addition of the premise 2 – by modus ponens. This implicit premise is difficult to dispute. But we might challenge the explicit premise 1 by pointing out that even if you shouldn't be blamed for the bad deeds of your ancestors, you should nevertheless be allowed to take pride in their good deeds. Taking pride is not the same as taking credit. Still, there is a point to the argument that should be granted: It would be inconsistent to see the good deeds of ancestors as a reflection of one's own worth but to refuse to do the same concerning bad deeds.

6. If the universe was created, then there was a time at which it did not exist. If there was a time at which it did not exist, then there was a time at which nothing was converted into something. But this is impossible. So the universe was not created.

*(1) If the universe was created, then there was a time at which it did not exist.*

*(2) If there was a time at which the universe did not exist, then there was a time at which nothing was converted into something.*

*(3) There wasn't (couldn't be) a time at which nothing was converted into something.*

*∴ The universe was not created.*

The argument can be seen as following the (valid) pattern:

(1) If A, then B.

(2) If B, then C.

(3) Not C.

∴ Not A.

Premise 1 is difficult to dispute, but premise 2 might be called into question. If the universe is conceived of as being separate from the mind of God, then it might be claimed that even when the universe did not exist, the mind of God did exist. Therefore, it wasn't necessary for nothing to be converted into something—the universe could have somehow been formed out of the mind of God. (Of course, it might be replied that forming something physical out of something nonphysical is also impossible, but that is a different argument.)

A8. People have the right to do whatever they want to with their own bodies.  
Therefore, a pregnant woman has the right to have the fetus aborted if she wants to.

*(1) People have a right to do whatever they want with their own bodies.*

*(2) A fetus is part of a pregnant woman's body. (IMPLICIT)*

*∴ A pregnant woman has the right to have the fetus aborted if she wants to.*

The conclusion follows from the premises. If being part of one's body simply means being connected to one's body, then the implicit premise is true, but the stated premise is doubtful. If you connected a weapon to your hand, for example, you wouldn't have a right to do whatever you wanted with it. Nor would you have such a right if you somehow attached yourself physically to another person (say with handcuffs). If the stated premise is qualified to be made more acceptable, the implicit premise becomes difficult to maintain. For example, if a person is allowed to do anything with a part of her own body that doesn't adversely affect any other person, then it might be replied that the arguer must not simply assume that the fetus is not another person.

A 10. No one should get married. This is so because getting married involves promising to live with a person for the rest of one's life. But no one can safely predict that he or she will remain compatible with some other person for life.

*A simplified Reconstruction of the Argument*

*(1) If marriage is permissible, then promise of life-long living together is justified.*

*(2) The promise of life long living together is justified only if predicting of life-long compatibility is justified. (IMPLICIT)*

*(3) Predicting life-long compatibility is not justified.*

*∴ Marriage is not permissible.*

*A more “nuanced” reconstruction closer to the words of the actual text*

*(1) Getting married involves promising to live with a person for the rest of one's life.*

*(2) If two people aren't compatible, then they can't live together. (IMPLICIT)*

*(3) No one can safely predict compatibility with another person for life.*

*(4) No one should make a promise unless she or he can safely predict that she or he can keep it. (IMPLICIT)*

*∴ No one should get married.*

The “simplified” version of the argument is valid --an instance of extended modus tollens. (The validity of the more “nuanced” version doesn't fit one of the comment argument patterns) Premise 2 of both versions can be criticized by noting that two people could live together effectively without being compatible. They might have good reason for doing so—say economic reasons. Premise 3 in the first version and 3 and 4 in the second, rely on a questionable version of “prediction.” See p. 185-6 for more



## Discussion of Chapter 6 Exercise 6.1 A4, A6, A8

A4. I oppose the development of the Alaska oil fields. Those who support it base their case on the fantasy that such development poses absolutely no risk to the environment.

**Straw man. You are probably struck by the weakness of this argument attributed to the supporters of oil field development and distracted from considering that there are much stronger arguments that could be offered in favor of it.**

A6.

# The Two Paths



AT 13  
BAD LITERATURE



AT 13  
STUDY & OBEDIENCE



AT 20  
FLIRTING & COQUETRY



AT 20  
VIRTUE & DEVOTION



AT 26  
FAST LIFE & DISSIPATION



AT 26  
A LOVING MOTHER



AT 40  
AN OUTCAST



AT 60  
AN HONORED GRANDMOTHER

False dilemma and slippery slope. False dilemma because there are more "paths" than pure conventional virtue or complete corruption. Slippery slope because reading bad literature at age 13 isn't all that likely to lead to the subsequent steps in the picture. The argument might have been persuasive in its time because the disturbing thought of ending up an outcast could distract the reader from considering whether these are the only two paths and whether the steps down each path are really connected.

A8. Now is no time to restrict embryonic stem cell research. Either we move vigorously ahead without restrictions, or we might as well abandon this field and let millions suffer from diabetes and Parkinson's disease.

**False dilemma This argument gives you an all-or-nothing choice. This simplicity might be appealing, but proceeding with some restriction is a third choice, and no argument is given against it.**

## Return to Chapter 5 Definitions of Logical Connectives

### Negation

<i>A</i>	$\neg A$
T	F
F	T

### Conjunction

<i>Possible Situations</i>		<i>Truth Value of Compound Statement</i>
<i>A</i>	<i>B</i>	<i>A &amp; B</i>
T	T	T
T	F	F
F	T	F
F	F	F

### Disjunction

<i>Possible Situations</i>		<i>Truth Value of Compound Statement</i>
<i>A</i>	<i>B</i>	<i>A <math>\vee</math> B</i>
T	T	T
T	F	T
F	T	T
F	F	F

### Conditional

<i>Possible Situations</i>		<i>Truth Value of Compound Statement</i>
<i>A</i>	<i>B</i>	<i>A <math>\rightarrow</math> B</i>
T	T	T
T	F	F
F	T	T
F	F	T

### Biconditional

<i>Possible Situations</i>		<i>Truth Value of Compound Statement</i>
<i>A</i>	<i>B</i>	<i>A <math>\leftrightarrow</math> B</i>
T	T	T
T	F	F
F	T	F
F	F	T

## Review of determining the truth of more complex statements.

Possible Situations

Negation

Row

$\square$

$\neg \square$

1

T

F

2

F

T

Possible Situations

Conjunction

Disjunction

Conditional

Biconditional

Row

$\square$

$\Delta$

$\square \& \Delta$

$\square \vee \Delta$

$\square \rightarrow \Delta$

$\square \leftrightarrow \Delta$

1

T

T

T

T

T

T

2

T

F

F

T

F

F

3

F

T

F

T

T

F

4

F

F

F

F

T

T

Ex. 5.2 A2

$\neg B \rightarrow A$

F

T

Initial Assignment

T

Row 2 Negation

T

Row 1 Conditional

No A8!

Move from "inside" out

Possible Situations

Negation

Row

 $\square$  $\neg \square$ 

1

T

F

2

F

T

Possible Situations

Conjunction

Disjunction

Conditional

Biconditional

Row

 $\square$  $\Delta$  $\square \& \Delta$  $\square \vee \Delta$  $\square \rightarrow \Delta$  $\square \leftrightarrow \Delta$ 

1

T

T

T

T

T

T

2

T

F

F

T

F

F

3

F

T

F

T

T

F

4

F

F

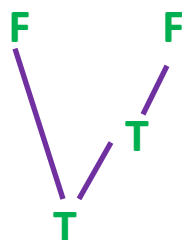
F

F

T

T

Ex. 5.2 B1

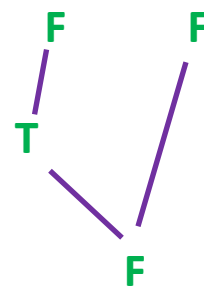
 $A \rightarrow \neg B$ 

Initial Assignment

Row 2 Negation

Row 3 Conditional

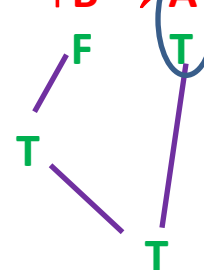
Ex. 5.2 B2

 $\neg B \rightarrow A$ 

Initial Assignment

Row 2 Negation

Row 2 Conditional

Ex. 5.2 A1  
Repeated $\neg B \rightarrow A$ 

Initial Assignment

Row 2 Negation

Row 1 Conditional

Possible Situations

Negation

Row

$\square$

$\neg \square$

1

T

F

2

F

T



Possible Situations

Conjunction

Disjunction

Conditional

Biconditional

Row

$\square$

$\Delta$

$\square \& \Delta$

$\square \vee \Delta$

$\square \rightarrow \Delta$

$\square \leftrightarrow \Delta$

1

T

T

T

T

T

T

2

T

F

F

T

F

F

3

F

T

F

T

T

F

4

F

F

F

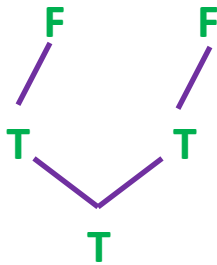
F

T

T



Ex. 5.2 B4  $\neg A \vee \neg B$



Initial Assignment

Row 1 Negation (twice)

Row 1 Disjunction

## Review of determining the truth of more complex statements.

Possible Situations      Negation

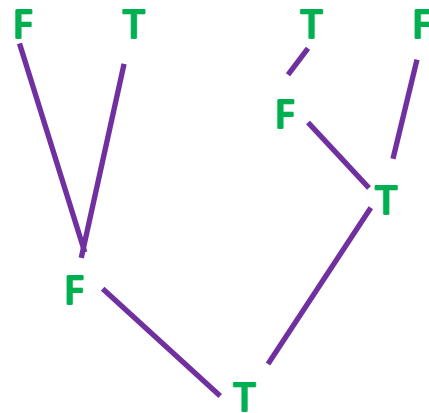
Row	$\square$	$\neg \square$
1	T	F
2	F	T

Possible Situations    Conjunction    Disjunction    Conditional    Biconditional

Row	$\square$	$\Delta$	$\square \& \Delta$	$\square \vee \Delta$	$\square \rightarrow \Delta$	$\square \leftrightarrow \Delta$
1	T	T	T	T	T	T
2	T	F	F	T	F	F
3	F	T	F	T	T	F
4	F	F	F	F	T	T

Ex. 5.2 C6  
Not  
Assigned

$$(A \leftrightarrow B) \vee (\neg C \leftrightarrow D)$$



Initial Assignment

Row 2 Negation

Row 4 Biconditional

Row 3 Biconditional

Row 1 Disjunction

Move from the Inside out



# Fallacies -- Faulty Arguments the Persuade

## Persuasiveness: Legitimate and Illegitimate

A fallacy is an argument that is illegitimately persuasive, that is it inclines an audience to accept its conclusion for reasons unrelated to its deserving belief. We do not call a bad argument a fallacy merely because it happens to persuade some unwary person. There must be a common tendency for the argument to be of a kind that persuades people, even though they should not persuaded.

We classify fallacies according the source of their persuasiveness

## Fallacies Continued: Fallacies that are tempting because they Distract

### Distraction

1. *False dilemma.* The arguer claims there are only two alternatives and one is unacceptable, so we should choose the other. But in reality, there are more alternatives than the two stated.  
*Example:* Either we legalize drugs or we keep filling prisons with drug offenders.
2. *Slippery slope.* The arguer says we shouldn't do P because P probably leads to Q, which probably leads to R, and so forth down the "slippery slope" to a final consequence that is clearly undesirable. But some of these steps are implausible.  
*Example:* Now they want us to register handguns. Next it will be all guns. Then they'll ban guns, and we'll be set up for a police state.
3. *Straw man.* The arguer makes a position appear strong solely by making the opposing position appear weaker than it really is. The arguer puts a weak argument in an opponent's mouth when stronger arguments are available.  
*Example:* We need a health care program that provides for the needs of the poor. Those who oppose this idea think that the private sector will provide for the poor. But this has not been the case in the past and will not be the case in the future.

## Fallacies Continued: Fallacies that are tempting because they Resemble Valid arguments

### Resemblance

1. *Affirming the consequent*. Any argument that has the following invalid pattern:  
(1) If A, then B.  
(2) B.  
-----  
 $\therefore$  A.  
*Example:* If the economy is improving, stock prices will rise. Stock prices are rising, so the economy is improving.
2. *Denying the antecedent*. Any argument that has the following invalid pattern:  
(1) If A, then B.  
(2) Not A.  
-----  
 $\therefore$  Not B.  
*Example:* If she loves you, she'll marry you. She doesn't love you. So she won't marry you.
3. *Equivocation*. An argument in which an expression shifts its meaning from one premise to another, making the pattern invalid.  
*Example:* Insane people shouldn't be punished. Someone who commits a murder must be insane. So murderers should not be punished.
4. *Begging the question*. An argument resting on a premise that is either a restatement of the conclusion or that would be doubted for the same reasons that the conclusion would be doubted.  
*Example:* The Bible says God exists. Everything in the Bible is true, since God wrote it. So God does exist.

**Fallacies that are tempting because they manipulate emotion :  
Appeal to Force, Appeal to Pity and Prejudicial Language**

1. *Appeal to force*. The arguer tries to get you to agree by indicating that *you* will be harmed if you don't agree.

*Example:* If you want to keep working here, you should reconsider your criticisms of company policy.

**The arguer does not provide a reasoning for believing that the criticism of company policy in question is false, at best he provide a reason for not publically proclaiming his belief.**

**But remember that we can sometimes deceive ourselves into believing something if we regularly say that we believe (even if we don't initially)**

*Appeal to pity.* The arguer tries to get you to agree by indicating that *she* will be harmed if you don't agree.

*Example:* I *am* qualified—I have some experience and I really need the money

**The arguer does not provide solid reason for believing that the he is qualified (beyond a perfunctory mention of some experience). Rather the arguer is providing at best a reason for hiring or recommending someone instead of the belief that the person is qualified.**

*Prejudicial language.* The arguer uses language that biases you in favor of a position or against an opponent's position without giving evidence for or against the position.

*Example:* Would you be so naive as to doubt the generally accepted fact that the finest painters were French?

**The arguer does not provide an reasons for believing that the finest painters were French, rather she suggests in unflattering terms that believing otherwise is a character flaw which is a false. Attributing this fallacy to an argument is easily overdone. As noted in the text, as statement such as “I hope you don’t condone a careless attitude toward the dangerous disease, AIDS,” doesn’t involve a fallacy because it makes no false implication.**

## Illegitimate Appeal to Emotion: Fallacy or not?

1. I've poured my soul into the task of writing this novel. I've worked on it late at night after spending the day on my regular job. I've endured rejections, gone through revisions, and at last it's published. What do you think about it?

*a) So the novel is good (fallacy)*

*b) It would make me happy if you said it was good, or sad if you didn't (not a fallacy but implication is no clear)*

2 Do I need to remind you how difficult it might be if you decide that you won't go out with me? After all, I make personnel decisions around here.

*a) Difficulties if you don't go out, so should believe that you should go out with me (fallacy)*

*b) Difficulties if you don't go out, so if you want to avoid hassle, you should go out with me. (not a fallacy but...)*

**Fallacies that are tempting because of both emotion and resemblance : Appeal to Authority and Attacking the Person. Language**

*Appeal to authority.* Appealing to someone whose expertise is not relevant to the issue at hand, or appealing to someone who is famous or admired, but not an expert on the issue at hand.

*Example of fallacious appeal:* A majority of doctors think that the morality of young people has declined.

**Medical doctors do not have any special insight into matters of morality in virtue of being doctors—though we might be emotionally predisposed to respect their opinions more generally because of a strong emotion tied to their medical pronouncements. (*Note: We have just described fallacious appeals to authority. There are also legitimate appeals to authority—appeals to people who really are experts in the appropriate areas.*)**



*Attacking the person (ad hominem).* Arguing that a person's point of view should be doubted because the person has bad traits of character or because the person has something to gain by being believed.

(Note: There are legitimate as well as fallacious cases of attacking the person. See text above.)

*Example of fallacious attack:* Most of the people who want drugs legalized are closet users.

**The arguer is using negative emotion that might be directed towards drug users to discredit the person's belief that drugs should be legalized. Although there may be some legitimate cases in which a trait of character is relevant. We might, for example, be justified in rejecting a person's testimony against someone if we learn that hate that person or have often lied before.**

## Double-Trouble: Fallacy or not?

1. I believe the economic issue is the important one in this election. I don't know that much about economics myself, but my mother-in-law teaches economics and my uncle has run a large business for years. I've talked it over with them, and I think that the Republican candidate would probably do a better job of guiding the country's economic policies.

**It might be claimed that this is the fallacy of appeal to authority. It is questionable whether running a business makes one an authority concerning the economic policies of a country; one could teach in a narrow area of economics that is relatively unrelated to questions of national economic policy. There surely are better authorities that the speaker could consult. But it must be admitted that these supposedly better authorities often disagree (see Chapter 11). It must also be admitted that the speaker of the argument is probably taking a better course of action in consulting with these two people than he or she would be in voting out of complete ignorance.**

2. Here you are quoting Ben Franklin on the subject of how one should live his life. But what kind of a life did Franklin himself live? I've read that he was a very difficult man, prone to depression, hard to please, impatient with those around him. When you judge a man's philosophy you have to see how it worked for him

**The question is whether this is a fallacious attack on the person. If Franklin gave reasons for living in certain ways independent of any attempt to set an example, then an assessment of his philosophy of life should focus on these reasons. Perhaps Franklin wasn't able to follow his own advice concerning how one should live, but his advice would work for many other people. Still, since Franklin had his own rules available to him as guides for living, if his own life was not happy, then this raises the question of how useful or workable his rules would be for others**

1. You've been contradicting everything I say. The point I'm making is an obvious one. Obamacare will ruin the quality of medical care in the U.S.

**Fallacy of prejudicial language (“contradicting,” “obvious,” perhaps “Obamacare”). No reasons giving for believing that the program will ruin the quality of medical care**

1. Tina has never had a Teddy Bear. A mother's love. A doll to cuddle. Tina knows nothing of these things. But she does know fear, rejection, and hunger. For just \$15 a month, you can help save a child like Tina. Through our "adoption" program you can help provide a child with a better diet, clothes, medical attention, school. And even a toy or two. But don't wait. There are so many. And somewhere, right now, a child is dying from starvation and neglect.

**Is this a fallacious appeal to pity? Not according to our analysis of when it is appropriate for an argument to appeal to emotion**

2. Anyone who serves as president of this organization has a duty to promote its interests that's written in the charter. Supporting gender equality goes against the interests of this organization. A duty is, by definition, a moral obligation. So as president of this organization, I have a moral obligation to oppose gender equality. Actually, this is an obligation I am happy to fulfill, because I firmly believe that gender equality is a dangerous idea. You can predict the kind of behavior it will produce in women generally if you look at the angry, hysterical, man-hating females who are leaders of this movement. I would argue that the gentle, ladylike demeanor which is befitting of womankind will all but disappear if the feminists succeed in promoting their cause.

**Equivocation on “duty” (narrowly in terms of aspects of jobs versus moral duty all things considered ; prejudicial language “hysterical, man-hating”, “gentle, ladylike;” possible attacking the person(s) against feminists. No reasons give to oppose gender equality—with perhaps the dubious claim that gender equality would produce unacceptable behavior.**

## **Truth Tables as a way of establishing deductive validity**

## Possible Situations

## Negation

Row

 $\square$  $\neg \square$ 

1

T

F

2

F

T

## Possible Situations

## Conjunction

## Disjunction

## Conditional

## Biconditional

Row

 $\square$  $\Delta$  $\square \& \Delta$  $\square \vee \Delta$  $\square \rightarrow \Delta$  $\square \leftrightarrow \Delta$ 

1

T

T

T

T

T

T

2

T

F

F

T

F

F

3

F

T

F

T

T

F

4

F

F

F

F

T

T

Any Possible situation in which the premises are all True and the Conclusion False?

## Initial Assignments

A B

1. T T
2. T F
3. F T
4. F F

## Premises

 $A \rightarrow B$   $\neg B$ 

1. T F
2. F T
3. T F
4. T T

## Conclusion

 $\neg A$ 

1. F
2. F
3. T
4. T

 $A \rightarrow B$  $\neg B$  $\therefore \neg A$ 

Valid  
Modus Tollens

← OK

## Initial Assignments

A B

1. T T
2. T F
3. F T
4. F F

## Premises

 $A \rightarrow B$  B

1. T T
2. F F
3. T T
4. T T

## Conclusion

A

1. T
2. T
3. F
4. F

 $A \rightarrow B$ 

B

 $\therefore A$ 

Invalid, Fallacy  
of Affirming the  
Consequent

← OK

← Problem  
← Problem



Possible Situations

Negation

Row

 $\square$  $\neg \square$ 

1

T

F

2

F

T

Possible Situations

Conjunction

Disjunction

Conditional

Biconditional

Row

 $\square$  $\Delta$  $\square \& \Delta$  $\square \vee \Delta$  $\square \rightarrow \Delta$  $\square \leftrightarrow \Delta$ 

1

T

T

T

T

T

T

2

T

F

F

T

F

F

3

F

T

F

T

T

F

4

F

F

F

F

T

T

Any Possible situation in which ALL the premises are True and the Conclusion is False?

 $A \rightarrow B$  $B \rightarrow C$  $\neg C$  $\therefore \neg A$ 

Initial Assignments

A B C

1. T T T

2. T T F

3. T F T

4. T F F

5. F T T

6. F T F

7. F F T

8. F F F

Premises

 $A \rightarrow B$  $B \rightarrow C$  $\neg C$ 

T

T

F

T

F

T

F

T

F

F

T

T

T

T

F

T

F

T

T

T

F

T

T

T

Conclusion

 $\neg A$ 

F

F

F

F

T

T

T

T

OK

Valid,  
Extended  
Modus Tollens

## Possible Situations

## Negation

Row

 $\square$  $\neg \square$ 

1

T

F

2

F

T

## Possible Situations

## Conjunction

## Disjunction

## Conditional

## Biconditional

Row

 $\square$  $\Delta$  $\square \& \Delta$  $\square \vee \Delta$  $\square \rightarrow \Delta$  $\square \leftrightarrow \Delta$ 

1

T

T

T

T

T

T

2

T

F

F

T

F

F

3

F

T

F

T

T

F

4

F

F

F

F

T

T

## Initial Assignments

## Evaluation of Statements for These Assignments

## Possible Situations

## Premises

## Conclusion

A

B

 $A \vee B$ 

B

 $\neg A$ 

1

T

T

T

T

F

Problem

2.

T

F

T

F

F

2

F

T

T

T

T

OK

3

F

F

F

F

T

Any Possible situation in which ALL the premises are True and the Conclusion is False?

INVALID

### Possible Situations

Row	$\square$
1	T
2	F

### Negation

$\neg \square$
F
T

### Possible Situations Conjunction Disjunction Conditional Biconditional

Row	$\square$	$\Delta$	$\square \& \Delta$	$\square \vee \Delta$	$\square \rightarrow \Delta$	$\square \leftrightarrow \Delta$
1	T	T	T	T	T	T
2	T	F	F	T	F	F
3	F	T	F	T	T	F
4	F	F	F	F	T	T

### Initial Assignments

#### Possible Situations

	A	$\neg A$	B
1	T	F	T
2.	T	F	F
2	F	T	T
3	F	T	F

### Evaluation of Statements for These Assignments

#### Premises

$A \vee B$
T
T
T
F

#### Conclusion

$\neg A \rightarrow B$	
T	← OK
T	← OK
T	← OK
F	

Any Possible situation in which ALL the premises are all True and the Conclusion is False?

VALID

Row	$\square$	$\neg \square$
1	T	F
2	F	T

*Possible Situations    Conjunction    Disjunction    Conditional    Biconditional*

Row	$\square$	$\Delta$	$\square \& \Delta$	$\square \vee \Delta$	$\square \rightarrow \Delta$	$\square \leftrightarrow \Delta$
1	T	T	T	T	T	T
2	T	F	F	T	F	F
3	F	T	F	T	T	F
4	F	F	F	F	T	T

**Any Possible situation in which ALL the premises are True and the Conclusion is False?**

<i>Initial Assignments</i>				<i>Premises</i>			<i>Conclusion</i>
	A	B	C	$A \rightarrow B$	$B \rightarrow C$	$\neg A$	C
1	T	T	T	T	T	F	F
2	T	T	F	T	F	F	T
3	T	F	T	F	T	F	F
4	T	F	F	F	T	F	T
5	F	T	T	T	T	T	F
6	F	T	F	T	F	T	T
7	F	F	T	T	T	T	F
8	F	F	F	T	T	T	T

**Problem**

**Problem**

**OK**

**INVALID**

## Interpreting and Evaluating: A Dialogue Process

### Three-Step Procedure for Judging Equivocation

1. Locate any unclear expressions that occur in more than one premise.
2. Determine what the expression must mean to make one of the premises true.
3. Determine whether the other premise(s) can be made true without changing the meaning of the unclear expression.

- (1) Getting **married** involves promising to live with a person for the rest of one's life.
  - (2) No one can **safely predict compatibility** with another person for life.
  - (3) If two people aren't **compatible**, then they can't live together. I
  - (4) No one should make a promise unless she or he can **safely predict** that she or he can keep it.
- 

∴ No one should get **married**

**“married”** needs to be interpreted as **“traditionally married”** with the vow “til death do us part” Note that on pain of equivocation, the conclusion must be interpreted this way well

**“safely predict”** is fairly vague 90% certainty, 80%, 50%? Problem a high standard that makes the truth of premise 2 more likely true, makes premise 4 more likely false

**“compatibility”** also a problem. The truth of premise 3 demands that “aren't compatible” means something like “have serious conflicts”. But this sense compatibility (absence of serious conflicts) makes premise 2 implausible.

### Three-Step Procedure for Judging Equivocation

1. Locate any unclear expressions that occur in more than one premise.
2. Determine what the expression must mean to make one of the premises true.
3. Determine whether the other premise(s) can be made true without changing the meaning of the unclear expression.

a) *Most students go to college to improve their job prospects. But the fact is that many areas of study particularly the liberal arts, don't strike students as preparing them for a vocation. They fail to see that living a life enriched by ideas is a kind of vocation. So when they quit college to get a job they are making a big mistake.*

**(1) Students want college to prepare them for a vocation.**

**(2) Living a life enriched by ideas is a vocation.**

**(3) College prepares you for a life enriched by ideas.**

**∴ College does prepare students for what they want.**

Equivocation. One might feel called to live a life enriched with ideas, but this doesn't make such a life a "vocation" in the sense of being a money-making occupation. But someone who wanted to postpone thinking about how to support himself might ignore this distinction.

- b. The United States is a democracy. This follows from the fact that the United States is ruled by the people and democracy means “government ruled by the people.”

*Reconstruction:*

***(1) The United States is ruled by the people.***

***(2) All countries ruled by the people are democracies.***

***∴ The United States is a democracy.***

- 1) democratic institutions
- 2) democratic practices

*Assessment:*

The argument is technically valid, but it might involve an equivocation. The United States has a form of government that allows for “rule by the people” rather than by a king or an aristocracy. The actual power of the people has varied during American history. It is possible to have democratic institutions without having democracy in practice. If the conclusion is construed as meaning democracy in practice, then we must construe it as such in the premises as well. The degree of actual citizen participation and impact in the U.S. government is a matter of some debate, especially if we look at American political and social history.

That's All Folks