

CRITICAL THINKING – HANDOUT 5 – IDENTIFYING THE CONCLUSION

Ships that pass in the night and speak each other in passing;
Only a signal shown and a distant voice in the darkness;
So on the ocean of life we pass and speak one another,
Only a look and a voice; then darkness again and a silence.

–Tales of a Wayside Inn, Henry Wadsworth Longfellow

1. What is the Conclusion

We have already looked at:

- (i) being able to identify passages of text and determine whether or not they are arguments, and
- (ii) being able to determine whether an argument is valid/invalid and strong/weak by using the imagination test.

Next, we will sharpen the first skill by

- (ii.1) learning how to identify the *exact* conclusion of the argument.

2. Why is Identifying the Conclusion Important?

There are *at least three reasons* why it is important to be able to identify the conclusion of an argument.

Reason #1: Identifying the conclusion helps us avoid talking at cross purposes. When arguing with someone, we don't want to waste time. We want to know what they are trying to argue for and we want them to know what we are trying to argue for. What we don't want is our criticisms addressing some *unrelated* argument or point and we don't want their criticisms addressing some *unrelated* argument or point.

Example of Two People Talking at Cross-Purposes	
Jon	I believe that the pro-choice is the ethically correct one because the rights of women outweigh the rights of an unborn fetus
Liz	Jon, are you telling me a human fetus is not a person, deserving of the right to life? That is, absurd! A human fetus is, first of all, a human being as it has the same DNA that you and I and all other humans have. And, secondly, all humans have a right to life!
Jon	What? Are you trying to say that the rights of women are not important and can be ignored at the drop of a hat? That is absurd.

Notice that Jon and Liz are arguing at cross purposes. Each fails to see the *exact* conclusion of the other side and each spends sometime arguing against a position that no one holds. Jon does not claim that *a human fetus does not have a right to life*. Instead, his exact conclusion is that *the rights of the pregnant mother outweigh the rights of her unborn fetus*. In responding to Liz, Jon also fails to understand the conclusion that Liz is arguing for. Liz does not argue for the conclusion that *the rights of women are unimportant and can be ignored*. Rather, Liz's conclusion is that *all humans (including the human fetuses) have a right to life*.

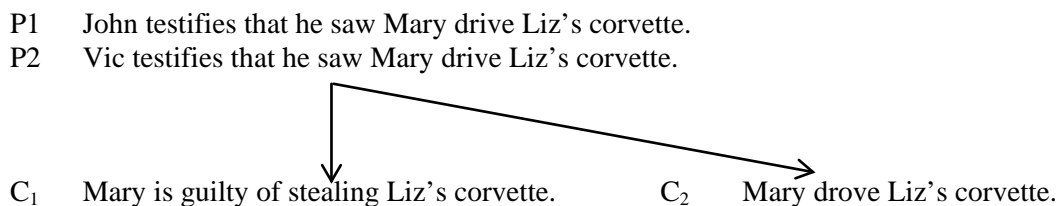
A second example of talking cross-purposes concerns The Pennsylvania State University's 2013 institution of a health-care initiative for employees.¹ This recent initiative requires Penn State employees to answer questions about their medical history in an online medical questionnaire and undergo a physical examination (biometric screening). Failure to do so results in a \$100 per month surcharge. A number of employees have criticized the initiative as inappropriate, claiming that the plan is coercive and invades their right to privacy. In response to the initiative, Matthew C. Woessner, associate professor of political science and public policy at Penn State Harrisburg, suggests that employees should submit to the requirements but to give bogus answers rather than disclose their confidential medical information. Jill Shockey, a spokeswoman for Penn State, has responded saying that responses to the online health questionnaire will remain confidential and that Penn State will only get aggregated data from the questionnaire.

The above is, to some extent, an example of two groups talking at cross-purposes. The employees of Penn State argue as follows:

- P1: Any health-care initiative instituted by an employer that coerces employees to give up their basic human rights is morally wrong.
- P2: Penn State's new health-care initiative involves a medical questionnaire that coerces employees to disclose confidential information about their medical history and their personal habits.
- C: Therefore, Penn State's new health-care initiative is morally wrong insofar as it coerces employees to disclose personal medical information.

At least from the excerpt above, Shockey does not address the *exact* conclusion of the argument above (however, this is probably excusable given that argument was not expressed so perspicuously). Shockey contends that *the results from the questionnaire will remain confidential*. But, the concern raised by employees is not whether the information will remain confidential; instead, the conclusion of the argument above is that the health-care initiative is morally wrong insofar it is pressures employees reveal medical information about themselves.

Reason #2: Identifying the exact conclusion is important because it plays an important role in determining how we evaluate an argument since one set of premises can weakly support a conclusion C₁ and strongly support a different conclusion and C₂.



Notice how P1 and P2 strongly support C₂ but they provide weaker support for C₁.

¹ 30 June 2013 *Chronicle of Higher Education* "Professor Urges 'Civil Resistance' to New Penn State Health-Care Rules" by Robin Wilson

Reason #3: Identifying the conclusion helps us realize what practical consequences will result, how we should behave, or how we should think if we accept the argument. Consider the following case:

Case #1: A defendant, who was working as a nurse in hospice care, is accused of murdering an elderly person. After a long trial, the defendant is found *not guilty*. Most of the jurors thought that the defendant likely committed the crime, but much of the evidence acquired by the police was ruled inadmissible. As the defendant leaves the courtroom, he triumphantly declares that he has been found *innocent* and says he is looking forward to returning to his job at the hospital.

Now imagine that you are the defendant’s employer. If you understood the conclusion of the case (i.e., the jury’s verdict) to be that the defendant is *innocent*, you might welcome the wrongfully accused employee back to work. The reason you would do this is because he has been *shown* to not have committed the crime. But, this is not the exact conclusion of the trial. In finding the defendant *not guilty*, the jury found that *the prosecution could not lawfully prove that the defendant committed the crime*.

That is, there is a difference between (1) proving someone *innocent* (not guilty) and (2) *establishing that someone has not been proven guilty*.

- (1) requires an argument showing that the defendant *did not do the crime*
- (2) requires showing that *the prosecution has not proven that the defendant did do the crime*.

The threshold for establishing (2) is much lower and makes a *practical* difference for how you think about the defendant and how you might behave toward him or her. (2) can be achieved by showing the prosecution does not have evidence to support their argument that the defendant did the crime, e.g. no witnesses or unreliable witnesses, no forensic evidence, etc.

3. How to Identify the Exact Conclusion

Identifying the conclusion of an argument is *critical thinking skill*. As with many skills, it can be developed.

Tip #1: The conclusion of an argument is often marked by certain stock phrases call **conclusion indicators**. These are different than terms that mark reasons or premises

Premise Markers	Example
Since	<i>Since</i> John ran a red light, it follows that he is a criminal.
Because	John is a criminal <i>because</i> he ran a red light.
For	John is a criminal <i>for</i> he ran a red light.
On Account of	<i>On account of</i> the fact that John red light, it follows that John is a criminal.
Conclusion Markers	
Therefore	John ran a red light. <i>Therefore</i> , he is a criminal.

Consequently	John ran a red light. Consequently, he is a criminal.
In conclusion	John ran a red light. In conclusion, John is a criminal.
It follows that	
Hence	
Thus	
As a result	
So	

However, note that just because a proposition has a conclusion marker does not mean it is the conclusion of an argument. Many of terms and phrases that belong to the category of premise or conclusion markers perform a different role. For example, the premise marker “since” can mark a point in time, e.g. John has been a criminal *since* 1995, while the conclusion marker “as a result” can represent the next event in a sequence, e.g. John didn’t show up to the party, as a result we didn’t have beer.

Tip #2: The conclusion of an argument can be identified by asking and successfully answering any one of the following questions concerning a passage of text:

- What is the argument trying to establish or prove?
- What is the arguer trying to convince you of?
- What is the aim of the argument?
- If I accept this argument, what am I supposed to believe?

Test Your Knowledge – Identify the Conclusion

Autonomy, or the ability to make rules for one’s self, is a basic human right. A government’s restriction of our autonomy through law should be limited to cases where an individual’s autonomy causes harm (or poses a serious threat) to someone else. An individual’s choice to use of marijuana does not cause harm or pose a serious threat to someone else. Marijuana should be legalized.

Tip #3: If you get stuck, perform the “therefore test”. Suppose you have an argument with five propositions: P, Q, R, S, T. By means of other tests, you have decided that the conclusion is **P** or **Q**. If you must make a decision, construct two different arguments, one with **Q** as the conclusion and another with **P** as the conclusion:

- Argument #1: Q, R, S, T, therefore P.
- Argument #2: P, R, S, T, therefore Q.

If one of the arguments is more plausible, choose the conclusion of that argument as the conclusion. NOTE: this is a slightly controversial assumption we are making here, but we will get back to this in a later chapter.

Example of the “Therefore Test”

Example: *We should ban all assault rifles. Assault rifles kill people. Killing people is wrong. There should be*

<i>bans for all actions that are wrong.</i>		
P1: We should ban all assault rifles. P2: Killing people is wrong. P3: There should be bans for all actions that are wrong. C: Therefore, assault rifles kill people.	OR	P1: Assault rifles kill people. P2: Killing people is wrong. P3: There should be bans for all actions that are wrong. C: Therefore, we should ban all assault rifles.

Tip #4: Sometimes the conclusion is more exact than the one that is explicitly stated. When this is the case, (i) include any information that the arguer assumes but does not state and (ii) use some common-sense facts about human beings and communication in general to *infer the exact conclusion*.

Example of an Argument whose Conclusion is not Explicit
Many people want to increase laws that regulate the possession of firearms. In response to those who want to strip away our right to bear arms, I have a simple argument: Guns don't kill people, people kill people. It is impossible for the trigger of a gun to be pulled without someone pulling it.

In the above argument, note that the arguer explicitly proves the proposition that *It is not the case that guns kill people; rather, it is people with guns who kill people*. However, it is unclear why the arguer would argue for something so obvious.

Exercises

- A. Determine the exact conclusion of the following arguments (it may be unstated):
 1. With all environmental laws in place, people still do not take the environment's health seriously. Some fail to recycle accordingly, and live "green" in general. We must conclude that stricter environmental laws should be enforced.
 2. We should ban all sports from our society. Individuals who play sports tend to be more prone to fighting, accident, and injury. In addition, all of this fighting does not set a good example for the children.
 3. Testing cosmetics on animals is morally wrong, a form of animal cruelty, and anyone who does it is an evil person. First, most of the cosmetics that pass in animals during testing, is not suitable for humans. Second, there are so many other non-animal research methods that are more accurate. Third, testing on animals is unnecessary since the world truly does not need another lipstick, soap, or food ingredient.
 4. Steroids should be banned from sports. Steroids are dangerous to the athletes, and they also create an unfair athletic advantage to athletes. This unfair advantage can lower the integrity of the sport.
 5. It makes little sense as to why the drinking age is 21. Teens become adults at the age of 18. Once a teen becomes an adult, he or she is capable of many decisions. The adult can enter into the military which can be life threatening. He or she can also vote on who the next president of America will be which could cause the rise or downfall of the country. These important are not nearly as dangerous as having an alcoholic beverage at dinner though.
 6. State College Borough paid various bars in State College \$5000 a piece to keep their doors closed on Penn State's famous student holiday "State Paddy's Day." In previous years bars made near \$20,000 dollars on "State Paddy's Day" alone. So rather than allowing many bars a huge profit for that one day, the borough urged all of them to shut down and spoil the fun. Centre County should put tax dollars toward more productive use, rather than hindering the profits of local businesses.

4. Complex Conclusions

The examples we have thus far considered are one where the conclusion has been a simple proposition. In developing the skill even further, it is worthwhile to consider some cases where

the conclusion is *complex* or involves *multiple-parts*. In everyday life, in your job, or in real-life arguments, you will often find individuals arguing for highly complex conclusions. Your boss may argue that Apple Inc. stock will rise *and* IBM Inc. stock will fall. So that you don't talk at cross-purposes, improperly evaluate, or fail to understand the proper consequences of his argument, it is important to understand that any argument given to support this conclusion needs to support *both* parts of this conclusion.

Consider the charge for *breaking or entering* (p. 69) in North Carolina. In order for a defendant to be found guilty of breaking or entering, the prosecution must prove that the defendant committed *all* of the following beyond a reasonable doubt:

- Condition #1: there was a breaking or entering, AND
- Condition #2: there was a building being broken or entered, AND
- Condition #3: the owner or tenant did not consent to the breaking or entering, AND
- Condition #4: at the time of the breaking or entering, the defendant intended to commit some specific felony.

The exact conclusion that a prosecutor needs to establish is that the accused committed Condition #1, #2, #3, and #4. However, especially when that conclusion is complex, some individuals lose sight of the exact conclusion and only focus on *part* of the conclusion.

Classroom Exercise: Consider the following situations and determine whether an individual would be found guilty of breaking or entering:	
1	The prosecution has clearly established that the defendant strolled into a building.
2	The prosecution has clearly established that the defendant used an axe to enter a building.
3	The prosecution has clearly established that the defendant used an axe to enter a building and has shown that the defendant did so to steal Mrs. Troisi's jewelry.
4	The prosecution has clearly established that the defendant used an axe to enter a building and has shown that the defendant did so to steal Mrs. Troisi's jewelry and Mrs. Troisi called 911 to alert the authorities.

Ex.5-3

Theft by deception if and only if: A person is guilty of theft by deception if s/he purposely obtains property of another by deception. A person deceives if s/he creates or reinforces a false impression, including false impressions as to law, value, intention, or other state of mind.

Prepare a short (3-5min.) informal presentation that contains an argument why "not guilty" or "guilty" is the correct verdict.

Questions to Consider in crafting your argument

- 1a. What is the exact conclusion that the prosecution must prove for a verdict of guilty"?
- 1b. What is the exact conclusion that they claim they have proved?
- 1c. Have they proven what they must prove or what they have claimed to have proven?
- 2a. What is the specific conclusion that the defense must prove for a verdict of "not guilty"?
- 2b. What is the specific conclusion that the defense claims to have proven?
- 2c. Have they proven either what they must prove or what they have claimed to have proven?

Ex.5-4

Breaking or entering if and only if:

- a. there was a breaking or entering, AND

- b. there was a building being broken or entered, AND
- c. the owner or tenant did not consent to the breaking or entering, AND
- d. at the time of the breaking or entering, the defendant intended to commit some specific felony

Prepare a short (3-5min.) informal presentation that contains an argument why "not guilty" or "guilty" is the correct verdict.

Questions to consider in crafting your argument:

1. What is the exact conclusion that the PROSECUTION had to prove in order for the jury to come back with a verdict of "guilty"?
 - 1a. How do they support their conclusion?
 - 1b. How convincing is their argument?
2. What is the exact conclusion that the DEFENSE had to prove in order for the jury to come back with a verdict of "not guilty" of this conclusion does the DEFENSE contend has not been proven beyond a reasonable doubt?
 - 2a. How do they support their conclusion?
 - 2b. How convincing is their argument?