

February 2, 2007

**Note:** Though the Introduction of the textbook (pp.1-23) was not explicitly assigned reading, (thanks to those students who mentioned this to me) I highly recommend you read it, since you get a good overview of some of the most basic 'moves' in ethical arguments. I'm sure the instructor would agree with me here as well ☺

## LOGIC STUFF

- **Argument Fallacies** : You were shown two types of fallacies, in Lecture II (Jan 30): *equivocation*, and *circular reasoning*. The enclosed doc on fallacies, (don't worry about the header paragraph concerning SFCS) however indicates there are plenty more kinds. This document might come in handy if you're troubled by a passage or passages in the readings, if your gut tells you there may be some faulty reasoning. Also, you might find the document useful when it comes time for writing your papers.

**Chia-Pei Horng (0207)** brought up a question concerning 'begging the question' and its relationship to circular reasoning. Circular reasoning is an especially acute version of question-begging, as the premises refer to the conclusion and vice versa. Question-begging, however, is a bit more general. One can 'beg the question' for (or against) a case by the very presuppositions one builds into a *definition*, which can either be too broad, or too narrow. In the case of it being too broad, like if I were to define all acts of altruism as just another form of selfishness, then I beg the question for an ethics based on selfishness since my very definition of selfishness is all-encompassing, i.e. leaves nothing *outside* its scope. On the other hand, one can beg the question for a position by being too *restrictive* in the scope of one's terms. For example (to refer to the discussion on Marquis), he begs the question for an *individualist ethics*, insofar as in his implied notion of intrinsic value, he excludes relationships. "What primarily makes killing wrong is neither its effect on the murderer nor its effect on the victim's friends and relations, but its effect on the victim. The loss of one's life is one of the greatest losses one can suffer." (68) By *a priori* (i.e., at the outset) ruling out alternatives like extrinsic (or intrinsic) notions of value based on relations, he begs the question for his case. It's like the economist/land developer begging the question for building a shopping-mall in some neighborhood, if he or she rules out as 'externalities' factors like pollution and traffic problems in the cost/benefit analysis.

In a nutshell, note that as stated in the other handout, these fallacies aren't necessarily independent categories: there can be overlap. (For instance, *ad hominem* and *red herring* both share the notion of *distracting* someone away from the *content* of an argument.)

- **Validity/Soundness- How to think about them**

Thanks to all the questions and counter-examples posed by **Almita Phillips, Syed Zaman** and others in 0206, the following analogy was presented:

Consider a calculator. If its internal wiring is correct, and it has no bad chips, etc., this is analogous to *validity*, which is a property of *logical form*. Whatever I punch into the calculator is analogous to *soundness*, which is a property of *logical content*. So, for

example, if I had a calculator that was correctly wired, and I punched in a sequence of random keys (say, something like: “+,1,-,-,5,6,×,=”) I could still get an *ERROR* message or something weird. (“Garbage in, garbage out.”) This situation would be analogous to a *valid* argument, which is *unsound*. An unsound argument can false or non-sensical content, and still be valid. (Example: “All square circles are flying pigs, and all unicorns are square circles. Therefore, all unicorns are flying pigs.”)

On the other hand, a calculator that’s on the fritz (whether by bad design, or abuse, or both)...well we don’t even *care* if it gives us right results or not. To put it another way, we wouldn’t *trust* its results anymore, its internal workings have become faulty. By the same token, we wouldn’t even bother with an invalid argument, *regardless* what its premises (‘inputs’) or conclusion (‘outputs’) are.

The calculator analogy serves another useful purpose: arguments are like conceptual ‘machines,’ or ‘computers.’ They have to be ‘designed correctly’ or consistently, based on certain ‘design rules’ of logic (we won’t worry what those rules are, but you might learn some of them in PHIL100, and you’d definitely learn them in PHIL170, PHIL270, or any advanced logic course).

- **Necessity/Sufficiency-How to think about them**

We tend to think of necessity in terms of ‘negative’ notions, like: “you can’t have one without the other.” Stated more formally, (recall Defn Jan 30)

$Q$  is a necessary condition for  $P$  means: “If not- $Q$ , then not- $P$ .”

On the other sufficiency tends to be thought of in ‘affirmative’ terms, like: ‘if you got the money, I got the time,’ etc. Stated more formally, (recall Defn Jan 30)

$P$  is a sufficient condition for  $Q$  means: “If  $P$ , then  $Q$ .”

However, keep in mind the following useful equivalence (which I won’t prove here...that’s a more formal matter in logic than what’s necessary to know for PHIL140):

“If not- $Q$ , then not- $P$ .”  $\equiv$  “If  $P$ , then  $Q$ .”

Intuitive examples make this equivalence seem pretty clear. For instance:

“If the baby’s not crying, she must not be hungry” is the same thing as saying:  
“If the baby’s hungry, she must be crying.”

Or:

“If Superman is immortal, Superman isn’t human” ” is the same thing as saying:  
“If Superman is human, then Superman must be mortal”

Etc.

So, hence with the above substitution, we can say:

$Q$  is a necessary condition for  $P$  means: “If  $P$ , then  $Q$ .”  
 $P$  is a sufficient condition for  $Q$  means: “If  $P$ , then  $Q$ .”

Moral to the story: what follows the ‘then’ (a conclusion-indicator in an argument, should  $P$  a list of premises) is what’s *necessary*, or what is *deduced*. On the other hand, what follows the ‘if’ (before the ‘then’) is suppositional, or *sufficient*.

This prompted some interesting insights from those in 0206. Specifically:

-**Christina Stennet** asked wouldn’t it be easier to learn necessity and sufficiency in this fashion? (I.e. what follows ‘if’ before ‘then,’ and what follows ‘then’?) Granted, it’s a more efficient way to think of these notions! However, it may be less intuitive, if one is relatively unaccustomed to dealing with the logic of conditional (if-then) statements. On the other hand, the ‘you can’t have one without the other’ way of thinking of necessity at the outset, seems intuitively appealing.

-Almita Phillips pointed out that in general, if one thinks of  $P$  as a list of premises, these sufficiency conditions are assumptions, a starting-point to a ‘given [argument] situation.’ One then tries to derive necessary conditions, which means making a minimal general deduction or inference. (By ‘minimal’ I mean, *based strictly on the assumptions in  $P$* )

Another interesting way to look at conditional statements is by phrasing them in what Aristotle called their ‘**universal A-form,**’ which goes as follows:

“If (someone) is  $P$ , then (someone) is  $Q$ .”  $\equiv$  “All  $P$  are  $Q$ .”

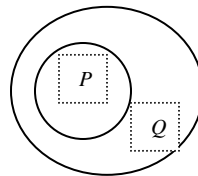
(Again, the proof is suppressed here)

Intuitive examples seem easy enough to come by. For instance:

“If Socrates is a man, then Socrates is mortal.” = “All men are mortal.”

The universal A-form enables us to ‘see’ better how sufficiency and necessity fit together. Recall the ‘blobs’ from Jan. 30 lecture

“All  $P$  are  $Q$ .”



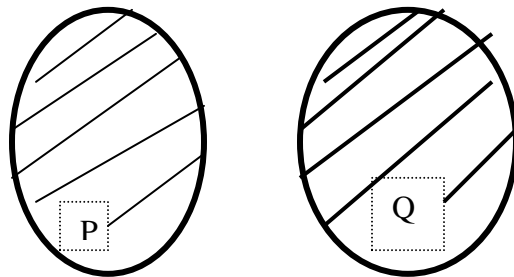
This further illustrates Almita’s remark concerning sufficient conditions having a ‘circumstantial’ character. After all, in terms of the ‘All men are mortal’, one could have started with any other predicate or class of living things, and derived the same conclusion (women, children, plants, birds, etc) Manhood isn’t necessary for mortality.

Aristotle also said that there are three other basic statements one can make, when building up arguments. (Think of them like the four basic ‘enzymes’ in a DNA molecule, for instance). They are:

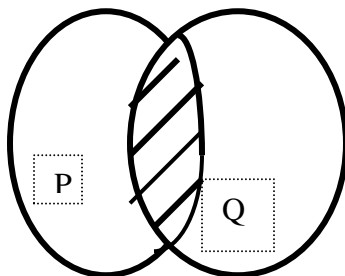
Form	Informal representation
A –	“All P are Q”
E –	“No P are Q”
I –	“Some P are Q”
O –	“Some P are not-Q”

In terms of ‘blobs’ they’d look like:

**For E:** “No P are Q”

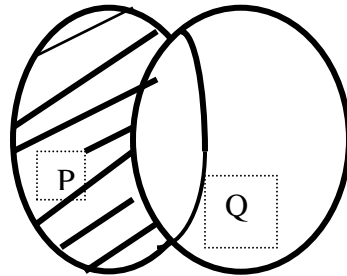


**For I:** “Some P are Q”



**For O:**

“Some P are not-Q”



Try to think of examples. For instance, consider Marquis’ central notion that: “it’s a sufficient condition for some(one) to have a property of a ‘future of value’ for you not to kill that someone.” This can be phrased then:

“If someone has the property of a future of value, then it’s wrong to kill that someone.”

Or in A- form: “All beings that have the property of a future of value, are beings to whom it’s wrong to kill them.”

In terms of the ‘blob’ diagram (for an A form), the *P* blob (those with the future of value property) falls inside the *Q* blob (those of whom it’s wrong to kill.) So in this move, Marquis is *not* saying that the future-of-value property is the *only* reason why it’s wrong to kill (that someone)

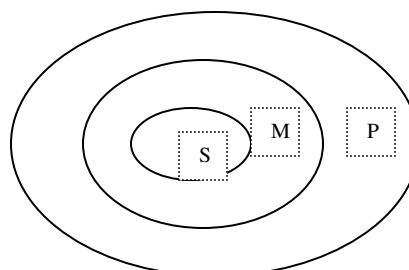
- **How to determine validity**

Like most central questions in logic, there is no simple way. It can get technical, for complex cases. I present two (relatively simple) cases, known already by the Medieval logicians as argument forms ‘Barbara’ (AAA) and ‘Ferio’ (EIO)

‘Barbara’ is an argument in which its premises and conclusion are all A-form. Its *only* valid depiction is: (call it ‘Barbara-1’)

All M are P  
All S are M  
Therefore, all S are P

As you saw (in many cases, drew on the board, thanks volunteers!) in terms of blobs, Barbara 1 looks like:



'Barbara' however, turns out to be rather weakly valid. What this means is I can swap M, P or swap S and M in the premises (or both) and 'she' ('Barbara') will turn out to be invalid. Here are the possibilities:

'Barbara-2'

All M are P  
All M are S  
 Therefore, all S are P

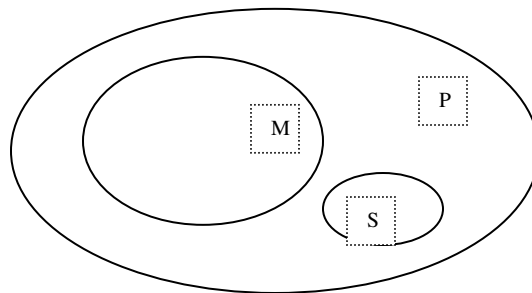
'Barbara-3'

All P are M  
All S are M  
 Therefore, all S are P

'Barbara-4'

All P are M  
All M are S  
 Therefore, all S are P

Using blobs, you can see why the conclusion won't hold. For instance, in the case of 'Barbara-2' we can have:

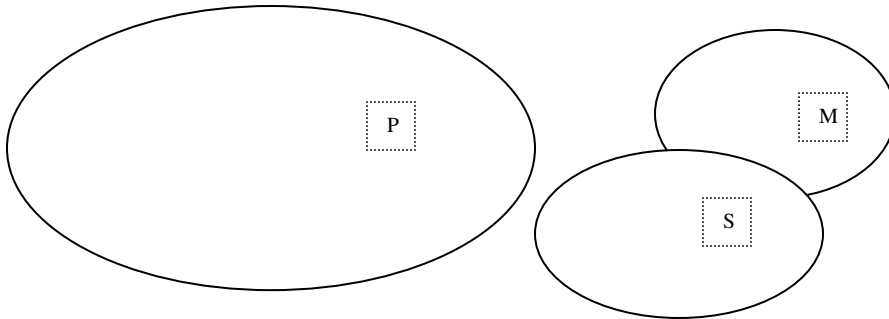


On the other hand, an argument like 'Ferio' (EIO) turns out to strongly valid—in the sense that in all four cases (in terms of switching M, P or M, S in the premises) the validity is preserved.

'Ferio-1' for instance is

No M are P  
Some S are M  
 Therefore, some S aren't P

In terms of blobs:



No matter how small or large I make S, the conclusion always holds (some S aren't P). In the above we have the special case in which 'some' of S which isn't P is *all* of S.

In terms of intuitive examples, one sees immediately what happens in the case of invalidity. Starting with true premises one gets to ridiculous conclusions. For example:

- Barbara 3. "Every mouse has fur, and all mice are animals, so every animal is furry." (HUH?)
- Barbara 4 (Example). "Every mouse is a small animal, and all small animals are lightweight, so everything lightweight is a mouse." (HUH??)

Try thinking of 'toy examples' in the case of 'Ferio' The object is to crank out sound arguments, so use true premises. Draw blobs to accompany

### MARQUIS' ARGUMENT

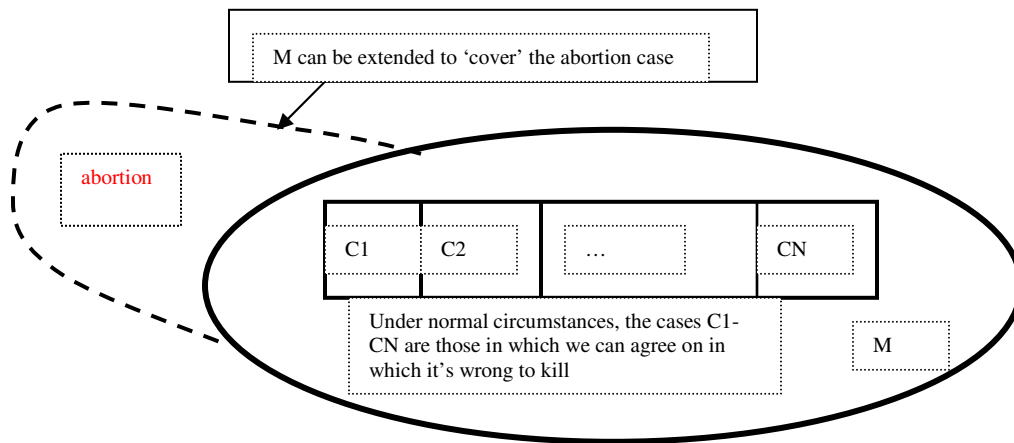
All this logic stuff mentioned above is really only the very small tip of a very huge iceberg. But hopefully, you may have a better notion of necessity/sufficiency, and validity/soundness. And more importantly, in simple cases at any rate, how can you test for validity should your intuition not give an answer—analysis can step in when intuition fails—or at the very least, analysis can make our intuitions clearer. The 'blob' method can help, in this regard.

Marquis' argument relies on Inference to the best explanation, or I-B-E. It runs as follows:

- 1.) Assume, (all things being equal, under all normal circumstances) there's a bunch of cases C1, C2, ..., CN we can all agree it would be wrong to kill someone in these cases.
- 2.) The general moral principle (M) which acts as a sufficiency condition for why it's wrong to kill, i.e. M is the 'natural property' of someone having a

- ‘future –of- (potential)-value’ is the best explanation for why it’s wrong to kill someone in the cases C1-CN.
- 3.) Now, consider case A: Abortion
  - 4.) M can be extended to ‘cover’ A, i.e. because a fetus is a being with the natural property of having a future of value, M acts as the best explanation for why it’s wrong to kill A.
  - 5.) Therefore, abortion (i.e. willful termination of pregnancy) is wrong.

In terms of ‘blobs’ the structure of the argument looks like:



As discussed in the text (Introduction, and also pp 65-67), like for most I-B-E arguments in general, there are three major places (‘weak spots’) one can launch a critical attack.

- 1.) One could dispute the notion that C1, ... , CN are cases we’d all agree on in which it’s wrong to kill someone, let alone that some general morality principle M could ‘cover’ such cases by explaining *why* it would be wrong to kill.
- 2.) Assuming, on the other hand, that we all agree that it’s wrong to kill for a list of cases C1-CN, under normal circumstances, one could still dispute that the general principle M is the *best* explanation for why it’s wrong to kill.
- 3.) Assuming, on the other hand, that M *is* the best explanation explaining why it’s wrong to kill, covering cases C1-CN, one could still dispute the claim that M can be extended to ‘cover’ the **abortion** case.

As the authors mention, it’s pretty useless to try to dispute Marquis from the standpoint of 1.) First of all, Marquis states already in section I. that he’s excluding ‘hard cases’ (cases posing difficult moral dilemmas and situations) so it would be hard to take issue with his claim that there are lots of cases (C1-CN) in which we’d agree, more or less, that it’s wrong to kill someone. Furthermore, the fact that Marquis argues that M is a *sufficiency* condition makes it a lot harder to argue against M covering such cases. After all, he’s saying, in other words, that M (i.e. the

property of having a future of value) is not the *only* reason why one should refrain from killing someone. He's saying that it's *a good reason* for providing an explanation for why it's wrong to kill people.

Most of the comments/questions from students attacked points 2.), and 3.) above, yet some gave critical comments that touched on the very core assumptions of Marquis' philosophy.

- **What of the welfare of the mother, or parent(s)?** This was a question addressed by **Shelby Watson (0207)**, **Ahmad Samarah (0202)**. Their comments and questions focused on what the authors (pp 65-66) point out that anti-abortionists tend to focus on the premise concerning the welfare of the child, at the expense of the premise of the welfare of the parent(s), while pro-abortion arguments tend to do the opposite. Marquis seems to beg the question in favor of an *individualist* ethics—value defined as some 'intrinsic natural property'. However, as **Sarah Kimel (0206)** and **Morgan Gerard (0202)** pointed out, the main reason Marquis does this is to cover the 'hermit' cases...to ensure in other words that his general moral principle covers the most cases (which he thinks relationist ethics don't do, as they define value in terms of interpersonal relations).
- **What if the child inherits a future with no valuable experiences?** This was brought up by **William Struthers (0207)**. On the face of this objection Marquis would respond that a future of (potential) value will not imply a valuable future—it doesn't need to. But there's deeper aspect to this objection brought up William, and echoed by others in similar comments in sections 0202, 0207. The basic issue is that Marquis is a consequentialist—basing the rightness or wrongness of an action on its consequences. There are, on the other hand *duty ethicists*, who argue that rightness/wrongness is based on duty, *as an end in itself*. Marquis, on the other hand, would look at duty as a *means to an end*, that end being *consequences*. Aside from some of the difficult utilitarian questions that come up, inevitably dealing with difficult 'cost/benefit' issues (i.e. recall lecture Feb 1, the mother would have to be killed to save the fetus, since the fetus has a potentially longer timeline to live, therefore a future of greater potential value) **Shelby Watson** pointed out that consequences are always relative. Marquis may not find this troublesome, but the point is he would have a tough time defining exactly what he means by 'under normal circumstances.' 'Normal' relative to *what?* To *consequences?* But consequences are relative to circumstances. So we have a circularity here. Is it vicious, or virtuous?