

Philosophy 101: Introduction to Philosophy, Queens College, Spring 2006
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Lecture Notes, February 1

I. Not a quiz

In your quizbooks, describe the classroom.
Write down 5-10 things that exist, and several properties of each.

II. Valid and Invalid Arguments

On Monday, we saw that the following is a valid form:

1. All men are fish
 2. Joe is a man.
- So, Joe is a fish.

If the conclusion of a valid argument is false, then one of the premises must also be false.
Since the conclusion is false, and the form is valid, we have to reject Premise 1.

We considered a few valid forms, like modus ponens and disjunctive syllogism.
There are also invalid argument forms.
These are fallacies, logical errors.

The fallacy of denying the antecedent:

1. If A then B.
 2. Not-A.
- So, not-B.

The fallacy of affirming the consequent:

1. If A then B.
 2. B.
- So, A.

In an invalid argument, the conclusion can be false, and the premises true.

III. Reductio arguments

Another valid argument form is the reductio.
It is based on the basic logical principle called non-contradiction (or, sometimes, contradiction).
The law of non-contradiction says that a statement can not be both true and false.
(Actually, it says that a statement and its negation can not both be true, which is, for our purposes, the same thing.)

The form of a reductio argument:

1. Assume the negation of something.
2. Derive a contradiction (p and not-p), or other repugnant conclusion.
3. Conclude the affirmative of your assumption.

Examples of reductio arguments:

If everyone may do as (s)he pleases, then we must allow murder.

If we legalize drugs, then violent crime will increase, or productivity will decrease.

If we do not go to war in Iraq, then Saddam Hussein will use his weapons of mass destruction against us.

IV. Soundness vs validity

Validity concerns form of argument.

'p and not-p' is invalid, no matter what assertion we substitute for 'p'.

The first step in evaluating an argument is to determine whether the premises entail the conclusion.

The second step is to see if the premises are sound (i.e. true).

Example A):

1. If AIDS is harmless then we need not take precaution against it.

2. AIDS is harmless.

So, we need not take precautions against AIDS.

Example B):

1. Any disease which threatens many lives is worth our concern.

2. Mumps is worth our concern.

So, mumps threatens many lives.

A) and B) are both bad arguments, but for different reasons.

A) is valid, passes the first test.

B) is invalid, we do not have to go to the second step.

A) is unsound - one of the premises is false.

Much of what I will do in this class will be to introduce an argument in this form.

If we do not like the conclusion, we will try to discover which of the premises are wrong.

V. Another logical property: transitivity

Transitivity holds for =, <, >, is

For example:

1. $(1+1) + (1+1) = 2 + 2$

2. $2 + 2 = 4$

So, $(1+1) + (1+1) = 4$

Also:

1. Theodore Geysel is Dr. Seuss.

2. Dr. Seuss is the writer of The Cat in the Hat.

3. The Cat in the Hat is a great book.

So, TG is the writer of a great book.

Now, consider:

1. God is love.

2. Love is blind.

3. Ray Charles is blind.

So Ray Charles is God.

What is wrong with this argument?

We wrote for five minutes, and then discussed various reasons the argument is invalid.

VI. Starting Descartes

Read ¶1 of Meditation 1.

Descartes wants something “firm and lasting in the sciences”.

He will reject all his beliefs.

To do this, he needs solitary, leisurely time to reflect.

You should find some for yourselves this weekend, and read, for Monday, the first Meditation, as well as the Letter of Dedication, and the Preface to the Reader. You should also at least skim the Outline, which is located between the Preface and the first Meditation.