Using Terminology Accurately (Premise, Conclusion, Valid, Sound) – Introduction to Moral Philosophy

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Today's main tip is something you almost certainly already knew to do: use terminology accurately. In other words, if you use a piece of terminology, don't use it incorrectly.

These tips will focus on four pieces of terminology that are especially important for this course: premise, conclusion, valid, sound.

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1. My cat weighs less than 20 pounds.
2. I can lift anything that weighs less than 20 pounds.
Therefore
3. I can lift my cat.

Valid arguments

A valid argument, as we noted last Friday, is one for which the conclusion follows from the premises. In other words, a valid argument is one for which it's impossible for the premises to be true and the conclusion false.

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1. My cat weighs less than 2000 pounds.
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For example, the following is valid:
1. My cat weighs less than 2000 pounds.
2. I can lift anything that weighs less than 2000 pounds.
Therefore
3. I can lift my cat.

The following is not valid:
I. My cat weighs less than 20 pounds.
II. Water is blue.
—
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III. I can lift my cat.

1. I own a pet elephant.
2. All elephants are reptiles.

Therefore

3. I own a reptile.

Valid or invalid?

1. I own a pet elephant.
2. All elephants are reptiles.
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Valid or invalid? Valid

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Valid or invalid? Valid

I. Most humans have two legs.
II. Bob has two legs.
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III. Bob is a human.

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Valid or invalid? Invalid

1. All Italian food is tasty.
2. Pizza is a kind of Italian food.

Therefore

3. Pizza is tasty.

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1. All Italian food is tasty.
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Valid or invalid? Valid

I. I forgot to drink coffee this morning.
II. I didn't sleep well last night.

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III. I am in a bad mood.

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Valid or invalid? Invalid

A sound argument is a valid argument with true premises.

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For example, the following is sound:

A. Manhattan is a city in Kansas.
B. Every city in Kansas is located in the United States.
C. Manhattan is located in the United States. (From A, B)

For each argument, say whether it is valid, whether it is sound, whether its premises are true, and whether its conclusion is true.

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1. All cats are over ten years old.
2. Giraffes are a type of cat.
3. Everyone in our class is a giraffe.
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4. Everyone in our class is over ten years old.

Practice

For each argument, say whether it is valid, whether it is sound, whether its premises are true, and whether its conclusion is true.

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2. Giraffes are a type of cat.
3. Everyone in our class is a giraffe.
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4. Everyone in our class is over ten years old.

1. Peaches grow in trees.
2. Madrid is the capital of Spain.
–
3. Blue is a color.

For each of the following, answer the question: is this possible? If so, give an example.

1. A valid argument with false premises and a false conclusion.
2. A valid argument with true premises and a false conclusion.
3. A valid argument with one false premise, one true premise, and a true conclusion.
4. A sound argument with a false conclusion.