



Monty Python and the Quest for the Perfect Fallacy

Teacher's Guide: **The Witch's Trial Argument**

Breakdown of the Argument

1. All witches are things that can burn.
2. All things that can burn are made of wood.
3. Therefore, all witches are made of wood. (from 1 & 2)
4. All things that are made of wood are things that can float.
5. All things that weigh as much as a duck are things that can float.
6. So all things that weigh as much as a duck are things that are made of wood. (from 4 & 5)
7. Therefore, all witches are things that weigh as much as a duck. (from 3 & 6)
8. This thing is a thing that weighs as much as a duck.
9. Therefore, this thing is a witch. (from 7 & 8)

Analysis of the Argument

There are actually four arguments being made here. Lines (3), (6), (7) and (9) are all conclusions, with (9) being the main conclusion of the argument. Let's take them one at a time.

The first argument:

1. All witches are things that can burn.
2. All things that can burn are made of wood.
3. Therefore, all witches are made of wood.

This is a valid argument. That is, (3) really does follow logically from (1) and (2). That's not to say that it's an especially convincing argument because premise (2) is rather obviously false. Still, if (2) were true, then the conclusion would have to be true as well. So this step is valid but unsound.

(Continued on p. 2)

The second argument:

4. All things that are made of wood are things that can float.
5. All things that weigh as much as a duck are things that can float.
6. So all things that weigh as much as a duck are things that are made of wood.

This argument commits the fallacy of the undistributed middle. The structure of the argument is the old familiar

All A is C.

All B is C.

Therefore, all A is B.

And that, of course, isn't a valid argument.

The third argument:

3. Therefore, all witches are made of wood.
6. So all things that weigh as much as a duck are things that are made of wood.
7. Therefore, all witches are things that weigh as much as a duck.

This argument has the same problem as the second argument. It's also an undistributed middle.

The fourth argument:

7. Therefore, all witches are things that weigh as much as a duck.
8. This thing is a thing that weighs as much as a duck.
9. Therefore, this thing is a witch.

Yes, once again, it's an undistributed middle.