Philosophy 101: Introduction to Philosophy, Queens College, Fall 2004
Russell Marcus, Instructor
email: philosophy@thatmarcusfamily.org
website: http://philosophy.thatmarcusfamily.org
Office phone: (718) 997-5287

Lecture Notes, November 29

I. Continuing with the Distinction Between Matters of Fact and Relations of Ideas

Relations of ideas derive from the law of contradiction: anything whose denial entails a contradiction is necessarily true.
In logic, we represent the law of contradiction as 'not-(p and not-p)'.
Other contradictions: 'not (p = not-p)', and 'not (p <> p)'.
The denial of 7+5=12, for example, leads to a contradiction.

II. Review questions from Hume Handout, I.

Questions 1-4 all refer to matters of fact.
Our knowledge of these can be traced to original impressions, according to Hume.
This turns out to be trickier than he thought, but we won't worry about that here.

Another complication has to do with our knowledge of ourselves.
Remember Berkeley's contortions over this problem.
Hume also thinks we have no impression of self.

Question 5 refers to a mathematical fact.
Mathematical sentences express relations of ideas.
Their denial is a contradiction.

Descartes had hypothesized that the reason we can know such sentences is that they are innate ideas.
For Hume, the meanings of words make these sentences true or false.
Perhaps the classic example, ' bachelors are unmarried', makes this clearer.

What about the last three? Are they relations of ideas?

Questions 6 and 7 refer to physical laws.
While the sun doesn't actually rise, we use that sentence as a kind of shorthand for the rotation of the Earth on its axis.
Put this aside.
Still, they don't seem like relations of ideas.

Compare denials of questions 5 and 6.
'2+2=5' is false because of the way the terms, or their referents, '2' and '5', are related.
'The sun won't rise tomorrow' is possible.
We thus can't have certainty that the sun will rise tomorrow, p 22.
We can't find out that the sentene is wrong by mere process of thought.

III. Physical laws are matters of fact

Questions 6 through 8 are thus matters of fact.
Are they true matters of fact?

We can not, because of our empiricist limitations, establish the truth of laws of nature, p 19.
The secret powers, the connections between events, are hidden from us.
Effects are distinct from their causes, 17.
Examples: billiard balls, knife in flesh, gravity, Adam.
We have no experience of the cause.
We only see the effects.
Consider our inability to know the properties of novel objects.

All beliefs about the world are based on experience.
Experience only tells us what was, not what has to be.
This follows from the fact that we have no access to the causes.

So we have no knowledge of both particular and general claims about laws of nature.
We don't know that the sun will rise tomorrow.
The problem is not that there might be a big explosion.
This could be consistent with physical laws.
The problem is that the laws could suddenly shift, from what we think they are.

IV. Hume's problem of induction

Our inability to know physical laws is generally known as the problem of induction.
How do we get knowledge of the unobserved?
Consider the example of the chicken and its feed.
Induction is how you know the facts in questions 6 and 7.
It is also how you know that the person next to you has a beating heart.

Hume's Skeptical argument about induction (Handout, VI):
1) Our beliefs about future events and unobserved objects are matters of fact.
2) Beliefs about matters of fact are based on experience.
3) Experience tells us how things were, not how they will be.
So, our beliefs about the future and the unobserved are uncertain.

A specific version of the problem of induction (Handout, VII):
1) I have seen one ball strike another many times.
2) Each time the ball which was struck has moved, motion was transferred.
So, the struck ball will move this time.

Notice that the conclusion doesn't follow.
You can see this if you consider what would happen if the laws of physics shift.
Then the conclusion could be false, while the premises remain true.

V. A failed attempt to solve the problem of induction

We need a further premise to make the conclusion follow from the premises.
Consider the principle of the uniformity of nature (PUN): The future will resemble the past.
See Handout, VIII, and p 22.
If we add PUN as a third premise, then the conclusion will follow.

What could justify PUN?
We have no basis for believing in it.
All inductive inference instead presupposes it.
We can't have it justify itself.
(Compare this problem with the problem of Cartesian circularity.)

If we had knowledge of cause and effect relations, we would know PUN.
But we only have knowledge of constant conjunction.
If we had knowledge of the connections, this would get us PUN.
But we don't have this, p 46.
We can't find effects in causes

Berkeley pulls the rabbit out of the hat.
See Hume on Descartes, 105.